

DECORATIVE
ELEMENTS IN
ARCHITECTURE
William
Franclyn
Paris

CORNELL
UNIVERSITY
LIBRARY



BOUGHT WITH THE INCOME
OF THE SAGE ENDOWMENT
FUND GIVEN IN 1891 BY
HENRY WILLIAMS SAGE

Cornell University Library
NK 2110.P21

Decorative elements in architecture; rand



3 1924 019 525 579

line



Cornell University Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

DECORATIVE ELEMENTS
IN ARCHITECTURE



I. PANEL FOR THE ELYSÉE
by Galland

DECORATIVE ELEMENTS
IN
ARCHITECTURE

RANDOM OBSERVATIONS ON THE
ETERNAL FITNESS OF THINGS
FROM A DECORATIVE
POINT OF
VIEW

WILLIAM FRANCKLYN PARIS, L.H.D.

Honorary Fellow Metropolitan Museum of Art; Trustee Museum
of French Art in the United States; Member Architectural
League of New York; Lecturer on Fine Arts, University
of Pennsylvania, etc., etc.

NEW YORK: JOHN LANE COMPANY
LONDON: JOHN LANE, THE BODLEY HEAD
MDCCCCXVII

E V

7976

E23

A. 364971

COPYRIGHT, 1917
BY JOHN LANE COMPANY

THE PLIMPTON PRESS
NORWOOD MASS U.S.A

TO MRS. CLINTON OGILVIE

IN less degenerate days, it was the pleasure of the well-conditioned class to encourage the arts and belles lettres by attaching to one's person artists and poets who painted and sang for the greater glory of the age.

We are alas far from that golden era, and wealth to-day is used to purchase old masters and not develop new ones.

The term "patron of the arts" has been abused, and too often it has meant, as Samuel Johnson so aptly put it, "one who looks with unconcern on a man struggling for life in the water and when he has reached ground encumbers him with help."

To have found one for whom to patronize has meant to help and encourage in the hour when help and encouragement were sorely needed, is therefor to have found something rare and infinitely precious. The inspiration which I have derived from patronage of this character impels me to dedicate this modest volume to you.

So I, "that love the old Augustan days
Of formal courtesies and formal phrase"

make public acknowledgment of my debt.

If aught that I have done merits to live beyond the brief hour for which it was wrought, it will be because my hand was guided by your good taste.

WILLIAM FRANCKLYN PARIS

FOREWORD

TOO little stress has been laid upon the fact that as much skill and science and understanding of art is needed in the adornment of the inside of a palace as is required in the designing and embellishment of the outside. The same problems of form and dimensions and styles which confront the architect in the planning of a cornice or the placing of a colonnade must be solved by the decorator who has a credence or a carved chest to fashion or a tapestry panel to install, with the added consideration that whereas the architect need only concern himself with difficulties of line, the decorator must weigh both line and colour.

As for the relative importance of the inside and outside either of a dwelling or public building, it all depends on whether the object is to impress and please those within, or those without. The Moors who builded the Alhambra considered solely the pleasure of those who were to inhabit it. The interior is of regal magnificence; the exterior is one of flat, unornamented mud walls.

Although this would appear to be an extreme view,

FOREWORD

it is infinitely more logical than the opposite one of embellishing the outside only. Yet examples are not wanting, particularly in this country, of millions spent on façades, and farthings only on interiors. Many a costly gown of silk or satin hides a tattered cotton petticoat. However, there is not the chief crime. It is when the petticoat is also costly and of silk, for it to be too long or too full or too green.

We have made tremendous progress in art since the day of the brown-stone stoop dwelling, built by the mile, and the Eastlake sideboard, built by the gross, but our petticoat is still occasionally too green.

CONTENTS

CHAPTER	PAGE
I. SUNT LACHRYMÆ RERUM	21
II. RATIONALISM IN ART	31
III. GUESSING AND KNOWING	39
IV. THE INHERITANCE OF THE PAST	56
V. PRINCIPLES AND ESSENTIALS	66
VI. THE DEVELOPMENT OF ORNAMENT	77
VII. DECORATIVE ELEMENTS	83
VIII. THE ART OF PENELOPE	94
IX. PAINTED GLASS	118
X. WROUGHT IRON	131

LIST OF ILLUSTRATIONS

PLATE	
I. PANEL FOR THE ELYSÉE, by Galland . <i>Frontispiece</i>	
II. RENAISSANCE DINING-ROOM <i>facing page 24</i> As for the relative importance of the inside and outside of either a dwelling or public building, it all depends on whether the object is to impress and please those within, or those without	24
III. TABLE— LOUIS XV	24
The forms of ornamentation must adapt themselves to the space which they are intended to decorate	
IV. GOTHIC WEDDING CHEST	26
The only proper ornamentation for a circular surface is an ornamentation of curves	
V. DINING ROOM	28
When it comes to the fashioning of appurtenances that must be lived with a whole life through, conservatism should rule	
VI. LIBRARY TABLE— HENRI II	28
It is no more plagiarism to take a carved panel from a XVI century church door and make of it a dominant feature in a XX century library table than it is to take a word from Sir Philip Sidney and incorporate it in an automobile prospectus	
VII. GOTHIC CHEST	30
It is better to repeat some brilliant epigram of the ancients than to utter a brand-new platitude	
VIII. SALON.	30
The decoration of a room does not hinge on the "chic" which a modiste can give to a gown or the decrepitude which an antiquarian can bestow on a piece of furniture	
IX. ARM CHAIR— LYONNAISE SCHOOL, XVI CENTURY	32
A chair may be doleful or festive, formal or familiar, dainty or robust, masculine or feminine	
X. GOTHIC SCREEN, CARVED WOOD AND TAPESTRY	32
The decorator who takes his art seriously should subordinate everything to the attainment of harmony	

LIST OF ILLUSTRATIONS

XI. LATTICE ROOM	Why do we have breakfast rooms?	34
XII. UNIVERSITY CLUB DINING ROOMS	Suppose that your dining room is to harbour men only	34
XIII. LOUIS XVI CHAIR	If the chair is to shelter a woman let the decorator bring out the full explicitness of that fact with carved motifs and soft tints	36
XIV. PANELLED ROOM—LOUIS XIV	A room intended for music and dancing and the harbouring of female loveliness and flounces	36
XV. GOTHIC TAPESTRY CHAIR	Dead wood and faded fabrics contain an inspiration	38
XVI. EMPIRE CHAIR.	A man's chair must be explicative of the personage it supports	38
XVII. RENAISSANCE CHAIR	A chair may be stiff-kneed and unsociable	38
XVIII. TAPESTRY SOFA	It is just as fatal for a console or divan to have too many legs, as for it to be out of proportion with the remainder of the ameublement	40
XIX. EMPIRE DESK CHAIR	A chair must be designed with the idea that its chief object is to accommodate a human body	42
XX. EARLY EMPIRE ARM CHAIR	A chair that is built to please the eye alone has fulfilled but part of its mission	42
XXI. LOUIS XVI BERGÈRE	Even when the covering is of Beauvis or Aubusson tapestry, anatomical considerations should govern its structure	42
XXII. ARM CHAIR FRAME	It is indispensable for all seats to be solidly established	46
XXIII. BOUDOIR ARM CHAIR	The difficulties in assembling the various component members of a chair grow as the chair departs from the straight line	48
XXIV. ENGLISH HALL	A decorative ensemble involves the architectural disposition, the composition, colouring and formation of the meubles, tapestries, rugs, lighting	50

LIST OF ILLUSTRATIONS

	<p>fixtures, the invention and arrangement of an infinity of units, all working toward the realization of an harmonious and homogeneous whole</p>	
XXV.	<p>LOUIS XIV MORNING ROOM The furniture of a man's room reflects the character of the man</p>	52
XXVI.	<p>CABINET—SPANISH SCHOOL The product of the decorator is less monumental than that of the architect, but not less difficult</p>	54
XXVII.	<p>BOULE CLOCK A form must be beautiful in itself. The artist can never hope to overcome its imperfections by means of applied decoration</p>	56
XXVIII.	<p>CARVED OAK ROOM The condition of beauty is made up of many elements. The first of these is symmetry</p>	58
XXIX.	<p>ENGLISH CLOCK Another decorative element typical of the Greeks is the flute or furrow with which they channelled their columns</p>	60
XXX.	<p>WATER COLOUR DRAWING FOR TAPESTRY In taking a growing plant or flower for a model the artist must carefully analyse his model and determine its exact constitution</p>	62
XXXI.	<p>WRITING TABLE, LOUIS XV BOULE The production of the artist must not clash with the idea of equilibrium</p>	64
XXXII.	<p>UNIVERSITY CLUB, REMODELLED HALL TO PRIVATE DINING ROOMS In forms of two dimensions, the chief requisite is that of a pleasing outline</p>	64
XXXIII.	<p>LIBRARY—EARLY XVI CENTURY An ornamentation can be symmetrical following any number of axes</p>	64
XXXIV.	<p>LOUIS XVI INLAID DESK In objects having three dimensions form must satisfy two essential conditions: a good proportion and a good profile</p>	64
XXXV.	<p>ENGLISH SOFA Not only must an object be stable, it must appear stable</p>	66

LIST OF ILLUSTRATIONS

XXXVI. LOUIS XV CABINET	If the surfaces are of irregular outline in the sense of elevation, the same inequalities must govern the divisions and correspond with the variations of the form	68
XXXVII. LOUIS XIV CHAISE LONGUE	It is better to allow the form to remain naked than to cover it with ornaments which add no interest to it	68
XXXVIII. CABINET, LYONNAISE SCHOOL, XVI CENTURY	The symmetrical mode can be either absolute or relative. When absolute, the motifs will be rigorously alike, but disposed inversely upon each side of an imaginary line or axis	68
XXXIX. RENAISSANCE DINING ROOM	Divisions in the latitudinal sense are only optional when they divide a form which is regular in outline	68
XL. EMPIRE ARM CHAIR	Decoration is either inherent to Form or else superimposed or added thereto	70
XLI. FIRST PRESBYTERIAN CHURCH AT WATERTOWN	No matter what form of division is adopted, uncertainty must be avoided. It is essential to affirm and emphasize a perfect similarity or a notable difference	70
XLII. CEILING PANEL	An ornament happily disposed within a circle cannot be applied equally well within a square	70
XLIII. CARVED WOOD PANEL AND DOOR.	If the decoration involves a sequence of curved lines, rectilinear elements used sparingly create a pleasing contrast	70
XLIV. CARVED OAK MARRIAGE CHEST.	In a plane surface, such as a rectangular panel where the dominant sense is vertical, it is essential to dispose the decorative composition following vertical lines	72
XLV. ORIGINAL DRAWING FOR MORNING ROOM	The artist must adapt the ornamental forms which he uses to the space which he has to decorate	72
XLVI. COLONIAL HALL RESTORATION	It is easy either to flatten or heighten an object, at least apparently, by decorating it with lines either horizontal or vertical	72

LIST OF ILLUSTRATIONS

XLVII. PAINTED SCREEN	72
When the symmetry is relative only, the motifs remain similar but the details no longer are alike	
XLVIII. RENAISSANCE HALL TABLE	74
The artist is confronted with the necessity of composing the ornament especially to fit each distinct form to be decorated	
XLIX. LOUIS XIV REGENCE COMMODE	74
An example of perfect symmetry	
L. TRANSITION GOTHIC ARMOIRE—EARLY XVI CENTURY	74
LI. ARMOIRE—TRANSITION GOTHIC TO RENAISSANCE XVI CENTURY	74
Perfect symmetry above and false symmetry below	
LII. ORIGINAL DRAWING FOR A SALON	76
All works of architecture and of decorative art should possess fitness, proportion and harmony; all of which make for repose	
LIII. LOUIS XVI COMMODE	76
The first principle of a good proportion is that one of the elements of the form must predominate	
LIV. DINING ROOM PROJET	76
All ornaments should be based upon geometrical construction	
LV. DIRECTOIRE CONSOLE.	78
A Directoire console in which the ornament designated as "posts" is introduced	
LVI. LOUIS XVI PANEL FOR WAINSCOTING	78
The use of various units assembled together as in the trophies of the Romans, demands appropriateness as well as arrangement	
LVII. LOUIS XIV REGENCE DOOR	80
The shell which had already had its hour of popularity with the Romans, became the rage during the Renaissance and particularly during the reigns of Louis XIV and Louis XV	
LVIII. PANELLED ROOM—GOTHIC	82
The human face and form, conventionalized for decorative purposes	
LIX. LOUIS XVI PEDESTAL	82
A Louis XVI piece revealing Greek and Roman ancestry	

LIST OF ILLUSTRATIONS

LX(a).	LOUIS XIV DIVAN	84
LX(b).	SPANISH RENAISSANCE DIVAN Variation from the same theme	84
LXI(a).	TABLE LOUIS XIV REGENCE	86
LXI(b).	TABLE LOUIS XIV REGENCE <i>Plus ça change et plus c'est la même chose</i>	86
LXII.	PANELLED ROOM—GOTHIC An attempt at stylization in which Gothic and Renaissance elements are joined	86
LXIII.	ORIGINAL DRAWING FOR A DRAWING ROOM	88
LXIV.	ORIGINAL DRAWING FOR A LIBRARY	90
LXV.	LOUIS XV TABLE Surfaces with double curves, concave or convex, exercise a particular restraint upon the decorator	90
LXVI.	LATE XV CENTURY TABLE	92
LXVII.	ORIGINAL DRAWING FOR A BOUDOIR	92
LXVIII.	GOLDEN TRIPOD. TAPESTRY PANEL Part of decoration of Salon of the Elysée, by Galland	94
LXIX.	LYRICAL AND HEROIC POETRY, by Galland	94
LXX.	PASTORAL POETRY, by Galland.	94
LXXI.	CARTOUCHE From a carton by Galland for decoration of the Salon of the Elysée	98
LXXII.	"THE DEATH OF DU GUESCLIN," by Toudouze	98
LXXIII.	"THE CROWNING OF NOMINOE," by Toudouze	98
LXXIV.	"THE MEETING BETWEEN JOAN OF ARC AND THE CONSTABLE DE RICHEMONT," by Toudouze	100
LXXV.	"THE MARRIAGE OF ANNE OF BRITTANY AND CHARLES VIII," by Toudouze	100
LXXVI.	"VERTUMNUS AND POMONA," by Gorguet	102
LXXVII.	"ENTRY OF JEAN LE BON INTO DOUAI," by Gorguet	106
LXXVIII.	"THE POET AND THE SIREN," by Gustave Moreau	108
LXXIX.	WATER COLOUR DRAWING FOR TAPESTRY From the earliest civilization the decorative artist has closely observed the growth of vegetal species	110

LIST OF ILLUSTRATIONS

LXXX.	BEAUVAIS LOW-LOOM TAPESTRY, after Oudry	112
LXXXI.	SOFA COVERED IN BEAUVAIS TAPESTRY. The paucity of orders for monumental tapestries threw the Beauvais factory into the making of smaller pieces woven exclusively on the low loom and de- signed mostly as covers for furniture	114
LXXXII.	XIV CENTURY WINDOW With the XIV century there appears a tendency to make a window less of a mosaic and more of a tableau	118
LXXXIII.	PAINTED GLASS WINDOW. The lead does not always logically divide a design but frequently it asserts the contour and gives it an exaggeration needed in large spaces such as the window openings in Gothic cathedrals	120
LXXXIV.	LATE XIII CENTURY GLASS PANEL St. George and the Dragon	122
LXXXV.	PAINTED GLASS PANEL, XIII CENTURY. French vitrail, XIII century	126
LXXXVI.	XVI CENTURY WINDOW. In an English church in Sussex	128
LXXXVII.	WINDOW OF OLD GLASS FRAGMENTS The vitrails of the XV and XVI centuries gain in drawing and outline and in the variety of shades employed	130
LXXXVIII.	IRON LOCK PLATE In the XV and XVI centuries the use of sheet iron became general	130
LXXXIX.	IRON LOCK During the XV century French iron work, pris dans la masse, or chiselled from the solid, gained a fame that spread to every corner of Europe	134
XC.	WROUGHT IRON CONSOLE Each masterpiece of delicate tracery has had in it ten times the effort, and possibly ten times the skill, required in producing this work from wood or from a substance that can be carved from the solid and not beaten out in detail and assembled	134
XCI.	WROUGHT IRON LOCK This work presents an architectural ensemble in which every detail is carved from the solid	136
XCII.	LANTERN—LOUIS XVI STYLE A lampadaire of the XIX century that Benvenuto Cellini or Cafferi would not have disowned	138
XCIII.	FRENCH GOTHIC CHEST Ironmongery that approaches lace-making. A treas- ure in the Cluny Museum	142

LIST OF ILLUSTRATIONS

XCIV. FRENCH LOCK PLATE	144
XV century locksmithing	
XCV. MODERN GRILLE—SPANISH INSPIRATION	146
Modern grille work showing Spanish influence and inspiration	
XCVI. XIV CENTURY KNOCKER	146
XCVII. FRENCH DOOR KNOCKER	148
French Knocker XV century, pris dans la masse	
XCVIII. CHANDELIER	150
Thanks to the greater malleability of iron, the modern product is more finished.	
XCIX. GOTHIC LANTERN	150
A modern lantern in the execution of which the smith must share the credit with the designer	

DECORATIVE ELEMENTS
IN ARCHITECTURE

DECORATIVE ELEMENTS IN ARCHITECTURE

CHAPTER I

SUNT LACHRIMÆ RERUM

IN the course of that wonderful diatribe against the critics of his day which the only Gautier wrote as a preface to his "Mademoiselle de Maupin," among a thousand aphorisms, each more true, more striking, more clever than any of the maxims of La Rochefoucauld, appears the following: "*Il n'y a de vraiment beau que ce qui ne peut servir à rien.*" This thesis, which he develops to the complete mortification of the present and the great glorification of the past, is perhaps less defensible to-day than it was in 1834, but there is yet enough truth in it to provide a moral for the decadence of the minor arts which some pessimists assure us is at hand.

If we accept the truism that whatever is useful is ugly, we must accept the corollary that only those who can afford the useless can possess the

beautiful. It is evident that a dish by Palissy or Lucca della Robbia ceases to be a dish. Having ceased to be a dish, it becomes useless to those in need of a receptacle for beans or cabbage, and becoming useless it becomes beautiful. This *reductio ad absurdum* is not meant as a rebuke to Gautier. The masses may appreciate the beauty of useless things, but having only sufficient means to provide themselves with the things they actually need and that are really of use, they cannot have or enjoy or possess the others. These others are for the well-to-do, for those who, having no further material hunger to appease, can turn their attention to the satisfying of intellectual or artistic cravings—to the acquirement of useless things.

It is a condition which is as old as the world. Mæcenas, Lorenzo de Medici, Leo X, the Dukes of Burgundy, Charles V, Louis XIV, Sir Richard Wallace, the Marquis of Hertford, Lord Palmerston, Prince Demidoff, Basilewski, du Sommerard, Chauchard, the Duc de Morny, Henry G. Marquand, were patrons of the arts because their revenues permitted it. *La plus belle fille du monde ne peut donner que ce qu'elle a*, and no amount of enthusiasm or of art understanding will make up for the lack of five figures in the bank when it

comes to buying Gobelin tapestries or Caffieri bronzes.

We are far from that happy period when a Watteau could be picked up for 300 francs or a Mazarin Bible for 3 francs 50. To-day everybody is more or less of a connoisseur. The art amateur of the first half of the nineteenth century was a very different individual from the art amateur of to-day. Then, the collecting of unappreciated and undervalued treasures was a sacred rite, a sort of work of rescue in which a few apostles of the beautiful engaged out of pure love for the things they unearthed. They collected for the joy of collecting and would have scrupled to derive any pecuniary benefit from their prescience or keener discernment.

To-day we have changed all that, and the hideous word "investment" is used in connexion with the acquisition of works of art. Thanks to the frequent public sales in Paris, London, and New York, Hobbema, Raeburn, Monet, Degas, Benvenuto Cellini, and Laurana are subject to daily quotations, just like New York Central, Steel, or Amalgamated Copper. Paintings, wood carvings, rare books, furniture, porcelains — all are subjects of speculation. Not very long ago one of our most widely advertised patrons of the

DECORATIVE ELEMENTS IN ARCHITECTURE

fine arts announced the purchase of several Gustave Moreau paintings by saying that he had "just put twenty thousand on Moreau" — as who should say, "I've just put ten dollars on the red."

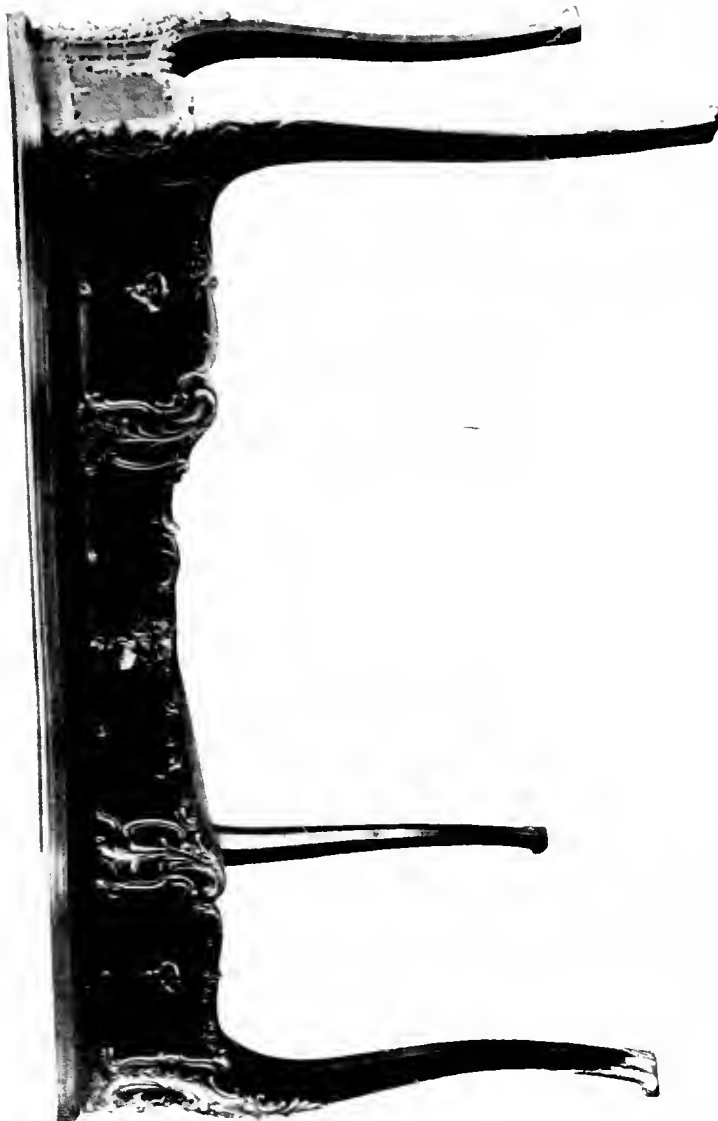
Almost inevitably the miserable arithmetic of dollars and cents obtrudes itself. The most ardent devotee of Corot, lost in admiration before the enchanting perspective of a morning landscape which he has just acquired, will feel, subconsciously as it were, that his new possession is worth ten thousand dollars in minted money. It is a work of art, if you like, but it is merchandise nevertheless. The transformation which has taken place in the general attitude of the public toward art in the last fifty years presents two contradictory characteristics: concentration and vulgarization.

The constantly increasing monetary value of works of art has restricted their circulation until only the extremely well-to-do may enjoy actual possession. But the development of photography and its allied reproducing processes, together with the general improvement in means of communication and travel, have spread the knowledge of art over a vast surface. Thanks to Cook's Tours and the picture post cards, the shopgirl in Tottenham Court Road or the farmer's wife in Kansas has a



II. RENAISSANCE DINING ROOM

As for the relative importance of the inside and outside either a dwelling or public building, it all depends on whether the object is to impress and please those within, or those without



III. TABLE—LOUIS XV

The forms of ornamentation must adapt themselves to the space which they are intended to decorate

mental conception of the Venus de Milo and the Parthenon. The average postman of to-day knows more, in a visual sense, about the Delhi Gate or the Alhambra than did the Archbishop of Canterbury a hundred years ago.

This familiarization with the aspects of art objects, gathered, it may be, from cursory reading of press dispatches announcing the collapse of the Campanile or the theft of "La Gioconda," has refined the public taste and raised the artistic average to a much higher plane than it occupied a generation ago.

This is nowhere so apparent as in the decoration of our public buildings. The hotels and theatres of to-day bear the same relation to the hotels and theatres of the nineties as does the present-day limousine to the velocipede of our grandfathers. This same amelioration observable in the trappings of public places is to be observed in the interior equipment of the homes of the *haute bourgeoisie*. The selling of beer or cheese or boots and shoes, even when done in large quantities, does not confer upon the man who does the selling a faculty for recognizing art, but it enables him to send his wife and daughter abroad and to put his son through college. Paterfamilias may think of Louis XV as a furniture dealer and imagine that

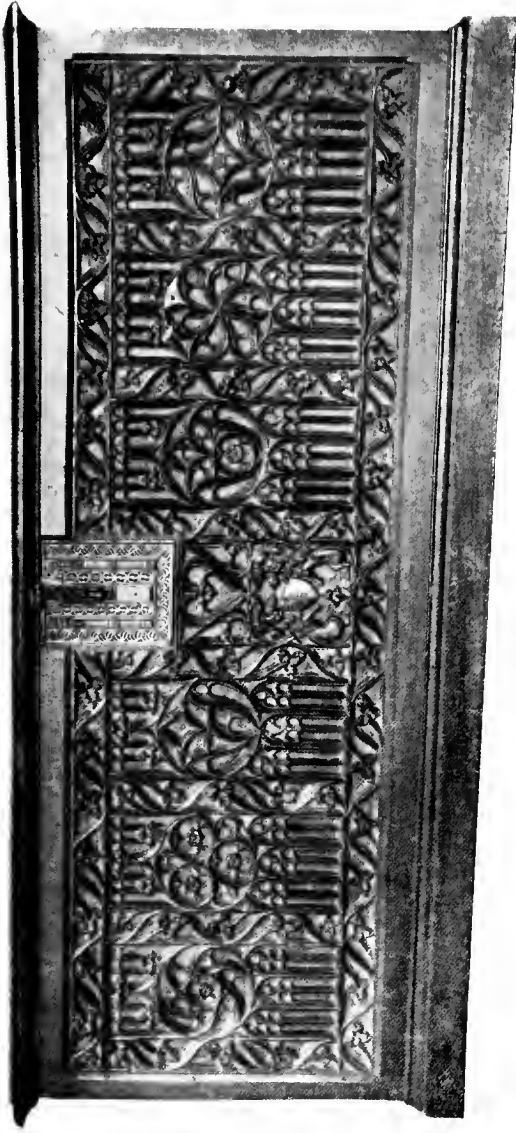
DECORATIVE ELEMENTS IN ARCHITECTURE

Sevres paste is something to eat, but mother and the children will have a broader horizon.

The emergence of the human race from primitive conditions was marked by a desire for self-adornment. The next step was in the embellishment of the place of habitation. In time, specialists were developed whose talent and efforts were directed toward the end of assembling harmonious forms and colours. Le Brun, Mignard, Boucher, Watteau, Falconet, Caffieri, joined hands in designing the furnishings of royal residences. A *dessus de porte*, a chair, a chimney mantel, a tapestry panel, a doorknob, a stair-rail — all these were worthy objects for striving by the best artists.

To-day a house is designed and caparisoned *en bloc*. We have decorators whose vocation was revealed to them by their taste in dress. The result is a cross between upholstery and millinery, a mongrel product that startles and disconcerts.

Another demonstration of the day before yesterday is the "store" decorator. Generally he is an old-curiosity-shop character having a non-descript collection of antiques to palm off. If he does not own this debris himself, he is in close relations with the man who does, and all his endeavours are directed to the disposing of some



IV. GOTHIC WEDDING CHEST

The only proper ornamentation for a circular surface is an ornamentation of curves

ancient Henri II chest or of a wooden *reredos* of the sixteenth century, which he proceeds to flank, face, and environ with the most heterogeneous retinue of "period" pieces.

Fortunately — or perhaps unfortunately — the decoration of a room does not hinge on the "chic" which a modiste can give to a gown or the decrepitude which an antiquarian can bestow on a piece of furniture. There is a technique to be learned about decoration, just as there is a technique to be learned about painting. A decorator is an artist, and artists are not born — they are made. The untaught decorator who has graduated into his vocation via Fifth Avenue and Newport or by way of Fourth Avenue and the Hotel Drouot will probably ornament a rectangular surface and a circle as if the two were alike, ignoring the fundamental principle that the forms of ornamentation must adapt themselves to the space which they are intended to decorate. It is useless to try to demonstrate to these self-made artists that the only proper ornamentation for a circular surface is an ornamentation of curves. The laws of symmetry were not made for them. Originality is their God and Caran d'Ache their prophet.

Five thousand years have taught them nothing.

Convinced that to be superlative is something, they substitute pyrotechnique for technique and "create" things that cause the simple to wonder, the cynical to sneer, the indifferent to laugh.

The man who has made a life work of interior decoration, of blending line and colour in an harmonious arrangement that will be unobtrusive and rest the eye, instead of putting it out, will be satisfied to follow in the wake of the artists and artisans who have passed the torch of good taste on from hand to hand through century after century. In such ephemeral things as bonnets and other articles of dress, radicalism may be condoned, as the harm done cannot be very lasting. But when it comes to the fashioning of appurtenances that must be lived with a whole life through, conservatism should rule. The beautiful lives everlastingly. The bizarre lives for a moment. Let us not waste time, therefore, in considering the aberrations of Eastlake, the dislocations of Art Nouveau, or the angularities of Mission. Art is a language, and while here and there it may gain a new word at intervals of a century or more, the fundamental vocabulary remains the same. Let us not try to coin new words, but rather to group and arrange the old words so as to produce a rhythmical measure, a new song, or a new poem.



V. DINING ROOM

When it comes to the fashioning of appearances that must be lived with a whole life through, conservatism should rule



VI. LIBRARY TABLE—HENRI II

It is no more plagiarism to take a carved panel from a XVI century church door and make of it a dominant feature in a XX century library table than it is to take a word from Sir Philip Sidney and incorporate it in an automobile prospectus

The unrhymed ten-syllable iambic line in which Shakespeare wrote his plays and Milton his epic may tend toward a beautiful lifelessness. Jacobean furniture may not always gladden the eye, but lofty and grandiloquent words and austere and dignified furniture each have distinctive roles to fill.

It is no more plagiarism to take a carved panel from a sixteenth-century church door and make of it a dominant feature in a twentieth-century library table than it is to take a word from Sir Philip Sidney and incorporate it in an automobile prospectus. It is better to repeat some brilliant epigram of the ancients than to utter a brand-new platitude.

Once in a great while the artist will stumble upon a detail of architecture which is dwarfed and overshadowed in its original application and which, removed from its surroundings and adapted to a new work, at once assumes an æsthetic value undreamed of by its originator. This may seem retrogression to those who must have something original at any cost, but this world of ours has been whirling in space a good while, and much that is altogether admirable has been done in that time. The roses that grew in Lesbia's time were as lovely as those that grow in the gardens of

DECORATIVE ELEMENTS IN ARCHITECTURE

to-day. Flowers, however, may be grouped with clumsy hand or else gain added loveliness from a sympathetic assembling. That is about all there is to art and good taste: first the eye to see and then the hand to group, to assort, and arrange.

We may not train the eye; the faculty to know beauty at sight may not be acquired; it is a gift of the gods—but the hand may be taught. The eye alone is the critic. The eye and the hand together is the artist.



VII. GOTHIC CHEST

It is better to repeat some brilliant epigram of the ancients than
to utter a brand-new platitude



VIII. SALON

The decoration of a room does not hinge on the "chic" which a modiste can give to a gown or the decrepitude which an antiquarian can bestow on a piece of furniture

CHAPTER II

RATIONALISM IN ART

THE decorator who takes his art seriously should subordinate everything to the attainment of harmony. He should consider carpets, hangings, furniture, wainscoting, rafters, doorknobs, lighting fixtures, wall paper, carved mouldings, and every detail of floor, walls, and ceilings, as so many elements entering into the fashioning of one complete "picture," as so many shades to be blended into one "tone."

It is just as fatal for a console or divan to have too many legs, as for it to be out of proportion with the remainder of the *ameublement*, or else out of spirit with the room itself.

First of all, the decorator, if he be an artist, must get his inspiration from nature. The role of art is to awaken in the mind the sense of nature. What nature has made is always artistic. The most prosaic, the most unspectacular of its manifestations will have in it artistic elements which

the mind of man, left to its own imaginings, could never have conceived. Take a moss-covered boulder by the roadside. Look at it closely. Observe how the colours are grouped, how fine the tracery, how the edge of green velvet lichen figures a spreading sea in which are little islands, some brown and spotted like chestnuts, others like rusted links in a coat of mail touched with verdigris. Here is a small tuft the colour of orange peel, and a cluster of infinitesimal small blue flowers like turquoises. See how instinctively the greens are grouped with the browns, and the orange with the blues. How harmonious the ensemble, how the preponderance of one gives to the apparently heterogeneous shades a unity of tone! What a lesson in colouring!

As for form, observe the skeleton of the rhinoceros and of the camel. It is in the skeleton that architecture finds all its formulæ demonstrated. In the rhinoceros the framework is heavy and thick-set, in accordance with its purpose, which is to support a massive and slow-moving bulk.

In the camel, built for rapid movement over the sands, the fundamental carpentry is slight and slender. The form of each, down to the last detail, is in accord with the functions to be performed.



IX. ARM CHAIR—LYONNAISE SCHOOL
XVI CENTURY

A chair may be doleful or festive, formal or familiar,
dainty or robust, masculine or feminine



X. GOTHIC SCREEN, CARVED WOOD AND TAPESTRY

The decorator who takes his art seriously should subordinate everything to the attainment of harmony

So it is with everything in nature. Always "there is a reason."

Similarly in art. There should always be a reason. It should be as easy for the architect to reconstruct Solomon's Temple from a wheelbarrow full of excavated debris as it is for the naturalist to reconstruct an antediluvian pachyderm from a fossil rib or jaw-bone. The same theory of proportion should apply: the general outline of a building should give indications of its *raison d'être* and of its purpose. Both in ensemble and in detail the real function, the uses to which it is to be affected, should stand revealed.

Of late years, however, the exterior often means nothing. We no longer build houses; we put up façades. This reproach, which the disciples of rationalism lay at the door of architecture of the present day, applies with equal force to modern furniture and the art of interior decoration.

In this generation alone we have Eastlake and the so-called Modern Gothic to live down, to say nothing of Art Nouveau and Mission.

While even a journeyman carpenter would today abjure the geometrical atrocities of the late, but not lamented, C. L. Eastlake, there are many examples of his shapeless scaffolding still to be found. The abominations of the Modern Gothic

have died a harder death even. Less than twenty years ago the neurasthenic furniture of this period pervaded the homes of our best people, and only yesterday the *bourgeoisie* went into spasms over the Mardi Gras styles, which, if they were nouveau, were certainly nothing besides.

The decorator of to-day may find food for thought in the contemplation of these freaks of artistic aberration, and learn from the study of these æsthetic "dont's" how *not* to do things. He will see that a chair may be doleful or festive, formal or familiar, dainty or robust, masculine or feminine. Furniture need not be inanimate. It may have character and soul, and convey delicate subtleties of feeling, a sense of soft sumptuousness, or of rigid austerity. It may possess Louis Quatorzian grace and court manners, or be stiff-kneed and unsociable. It may be straddled by a musketeer or overspread with the paniers and ribbons of the Marquise de Pompadour, but be certain that in the one case it will be of solid oak, and in the other of brocade and gilt wood.

Next to being representative of itself, indicative of a certain usage and of a certain user, your chair, to be *convenable* will have to fit in with the surroundings, to harmonize with its environment. Even our unsophisticated *restaurateurs*



XI. LATTICE ROOM

Why do we have breakfast rooms?



XII. UNIVERSITY CLUB DINING ROOMS

Suppose that your dining-room is to harbour men only

would hesitate to furnish their *rathskellars* with upholstered *bergères* of the Louis XIV period. "If one has anything to say, one might as well put it into a chair," Mr. Le Gallienne tells us. True, but some chairs have a roistering spirit, and consequently talk wildly and in loud tones. They must not be put in company with priggish, straight-laced furniture, built with scrupulous precision, and speaking in modulated terms and in the most unimpeachably correct manner. In such a company a chair may mumble, or say nothing, but it must not shout.

Consider a man's chair, — a chair that would suitably frame Edward Everett Hale or Lord Kitchener. It cannot be flippant, nor dainty, nor pink. It must, in a way, be explicative of the personage it supports. Without being unnaturally solemn, it must have poise and dignity. Logically, it will be an Elizabethan fauteuil, or something Gothic and in carved oak. Or else something in leather or tapestry. On the other hand, if the chair is to shelter a woman, let the decorator bring out the full explicitness of that fact with carved motifs and soft tints. Even empty, let such a chair evoke beauty, grace, and tenderness. Dead wood and faded fabrics contain an inspiration. There is more than is seen by the corporeal

eye in the tabouret of Marie Antoinette or the cradle of the Roi de Rome.

Just as the "sex" of a chair and the uses to which it is to be dedicated must be studied, so the spirit and complexion of a room must be absorbed.

A room intended for music and dancing, and the harbouring of female loveliness and flounces, will lend itself to crystal chandeliers and red and gold trappings. Even here there are graduations, and there are ball-rooms without these glittering gauds that nevertheless suggest the spirit of festivity.

Think of the varieties of dining-rooms. Some, as a fitting accessory, need an ancestor, real or apocryphal, painted by Velasquez. Why do we have breakfast rooms? For the simple reason that soft-boiled eggs do not harmonize with tapestries and old masters, but rather with chintz and caned chairs. Suppose, again, that your dining-room is to harbour men only — as for instance in clubs. Here, then, is another problem. Are these men wholesale butter and egg merchants, or fish-market folk, or are they lawyers, doctors, and men from the professions and colleges?

Not very long ago one of our most exclusive clubs, an organization famed for the culture and wealth and social prominence of its members,



XIII. LOUIS XVI CHAIR

If the chair is to shelter a woman let the decorator bring out the full explicitness of that fact with carved motifs and soft tints



XIV. PANELLED ROOM — LOUIS XIV

A room intended for music and dancing and the harbouring of
female loveliness and flounces

rejoiced in a dining-room finished in red-striped burlaps and white-and-gold woodwork.

Who shall say that under certain conditions this combination might not be altogether fitting, — say in the dining-room of a “Votes for Women” organization? Here, however, it offended and was promptly replaced by carved oak panelling, Elizabethan strap-work ceiling, and carved oak furniture. Since then the food tastes better and the speeches have more wit.

What is true of dining-rooms is true of sleeping-rooms, only more so. The more intimate the apartment, the more individual should be its furnishings. Here, the personal tastes of the occupant may be given expression. His — or her — preference for a colour may be studied, but always let the bed be a bed and not a ship, or a sleigh, or a monument, and let the chairs be sleeping-room chairs and not garden seats or library fauteuils. And because Marie de Medici slept under a baldaquin and behind curtains, let it be remembered that it was not because such trappings appealed to her and to her times on the score of decorativeness or beauty, but because in those days fresh air was an heresy and the fear of draughts widespread.

Beauty and *raison d'être* should be considered

together, never separately. Instinctively we all feel beauty. There is no such thing as the sin of original ignorance. We are all of us born learned. Each of us comes into this world with a set of personal faculties, and inherits at birth the accumulated intelligence and knowledge of his ancestors. The man that has in him the appreciation of a sunset has it also in him to appreciate the same sunset when put on canvas. To know beauty is to know art. Yet only a few are able to create beauty. A lamentably small number can piece together the squares that go to make up the mosaic or can aptly juxtapose the tints and colours that constitute a chromatic ensemble. They know a well-set stage when they see it set, but are helplessly incapable of setting it.



XV. GOTHIC TAPESTRY CHAIR
Dead wood and faded fabrics contain an inspiration



XVI. EMPIRE CHAIR

A man's chair must be explicative of the personage it supports



XVII. RENAISSANCE CHAIR

A chair may be stiff-kneed and unsociable

CHAPTER III

GUESSING AND KNOWING

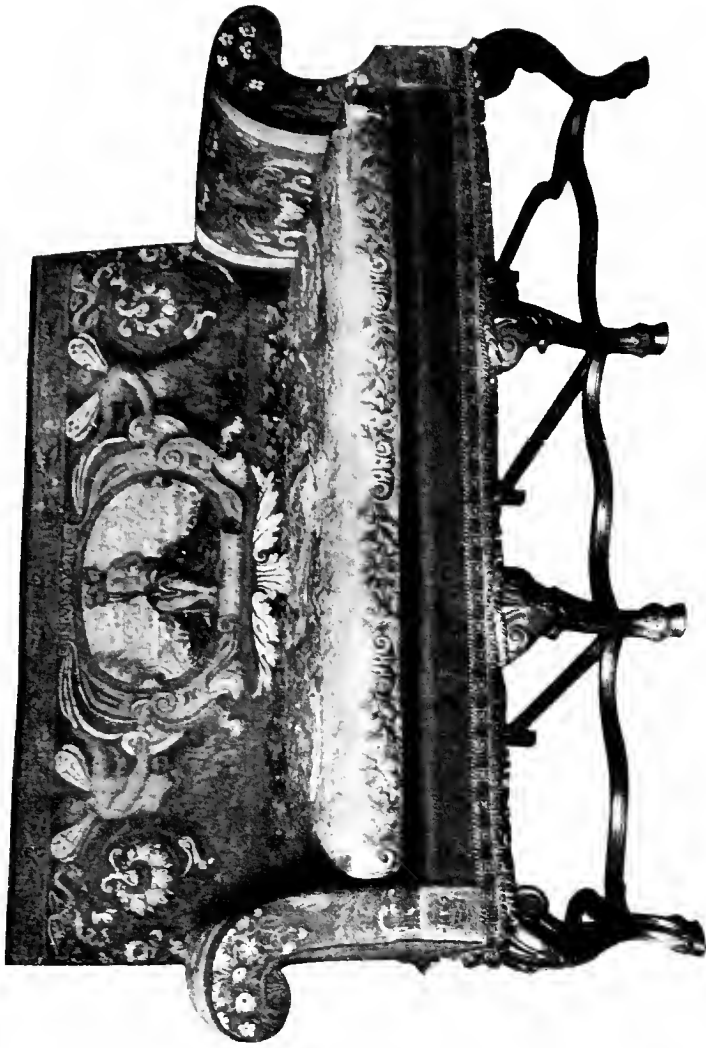
THE letters patent granted to the guild of cabinet makers of Paris in the year 1645 provided that all aspiring to the certificate of master workman were to appear before a jury of ten, picked from among the masters of the brotherhood, and that after making known to them the extent of his experience he was to establish himself in the home of one of the jurors, and there construct some article of furniture of a character and style imposed by the jurors.

If upon completion the work was not adjudged a *chef d'œuvre* the candidate was subjected to a fine of ten crowns and the labour of his hands burnt in public in front of his shop. The guild of cabinet makers enjoyed the further privilege of denying to any not adjudged master by the guild the right to construct, sell, or distribute in the territory of Paris anything pertaining to the art of cabinetry or furniture making.

This regulation was an inheritance based upon a

practice of three hundred years and assured that none but those qualified and of proven ability devoted themselves to the work of making or selling furniture.

It is regrettable that a restriction of this character and sort no longer exists and that any successful *modiste* or carpenter can engage in the work of interior decoration without previous knowledge or preparation. It has become a fad to go in for the making of hangings, the designing of furniture, and the general composition of interiors. It is to be regretted, however, that too many among those who play this game have no knowledge of the cards with which it is played, and enter into it solely under the impulse of financial profit. From a certain point of view, it is gratifying to find an art which, owing to the role it fulfils in our life, is the only one indispensable, enlisting so many in its cause. In the assembling of such a number of intentions and ideas, varying as to the means but in accord as to the end, there must result an outspreading and full blossoming of the cause which true artists have at heart. It is regrettable, nevertheless, that the newest recruits in the field lack knowledge and sometimes conscience and faith and fail to realize that to be a decorator and creator of *meubles* as much prepa-



XVIII. TAPESTRY SOFA

It is just as fatal for a console or divan to have too many legs, as for it to be out of proportion with the remainder of the ameublement

ration and as much knowledge is required in 1916 as was required in 1645 and for three hundred years before. The present is the age of the approximate, the startling, and there is a certain bravado about avoiding the "has-been" and attempting the "may-be," which because of this lack of preparation generally ends by being the preposterous. The majority, like the child who generously studs his composition with ink splashes in order to hide his uncertain spelling, conceal their shortcomings and ignorance by the introduction of some element which they imagine to be diverting. We have had empty paintings in which there was this amusing note; formless sculpture with an amusing substance; prosaic rooms decorated with an amusing fabric; amusing chairs; amusing cushions, — all so amusing as to be funereal. It is to art what a pun is to a witticism, and serves but to hide the inability of those who make use of it to create that which is substantially good and reasonably beautiful.

The duty of the conscientious workman in art and in everything else is to advance. It is a sign of decadence and of impotency not to be able to make use of the newly discovered means which the progress of the times has provided. The telephone, the modern system of electric lighting,

the development of one thousand and one agencies of comfort and increased luxury, should find an echo in furniture and interior trappings which reflect the spirit of the times; and the age of the automobile and of aërial navigation should manifest itself in more appropriate furniture language than is apparent in Assyrian styles from Vienna, Directoire styles from Munich, and Louis-Philippe atrocities from the department stores.

It is because of this lack of study and preparation, this lack of thought as to the object and purpose and general significance of the furniture and interior decoration of the present day, that it falls so far below the output of earlier days when only master workmen were permitted to create. One might look with tolerance upon the product of these untaught decorators, which, because it stirs neither the mind nor the heart, is doomed to die almost before it is born, were it not that these inexperience befog the vision and poison the taste of the uneducated public, which is precisely the public which needs most to be converted.

Another reproach to be laid at the door of these amateurs is that they are too often imbued with the belief that the essential thing is to create an effect. They strive to make an ensemble fit to be painted instead of something fit to live in. This



XIX. EMPIRE DESK CHAIR

A chair must be designed with the idea that its chief object is to accommodate a human body



XX. EARLY EMPIRE ARM CHAIR

A chair that is built to please the eye alone has fulfilled but part
of its mission



XXI. LOUIS XVI BERGÈRE

Even when the covering is of Beauvis or Aubusson tapestry
anatomical considerations should govern its structure

tendency toward the spectacular, the pictorial, the colour note, would be permissible in the designing of an environment to be endured for a matter of minutes or hours, but when the background is one that must enfold and surround the victim for years, and sometimes for a lifetime, the first consideration should be comfort, harmony, and restfulness, and not flamboyancy or theatricalism. The art of the *mobilier* — which is a better sounding word than furniture making — is of such importance that it may not be studied in detail without involving the analysis of decorative art in its entirety. It is an art which is also a *metier* and craft, and those who engage in it should not do so without understanding the one and mastering the other.

Decorative art is difficult and complex, and requires not only gifts of invention and of taste, but profound technical knowledge. It is not an art based upon imagination only, but one made also of material realization. The decorator must not only possess the qualities of an artist and poet; he must besides rely on a sound common sense, a positive sense of the practical, and a sound technique.

Decorative art is a composite of daring and restraint, of enthusiasm and wisdom, of imagina-

tion and of science, of a little madness and of a great deal of reason. It is not an idealistic art, but a material and a realistic art requiring to be thought out with minuteness by reason of the ever recurring difficulties of expression. The decorator sees his dream balanced by reality. His conception continuously feels the brake put on by practice; the thought is enslaved by traditional laws of matter, usage, and destination.

A decorative ensemble involves the architectural disposition, the composition, colouring, and formation of the *meubles*, tapestries, rugs, lighting fixtures, the invention and arrangement of an infinity of units, — all working toward the realization of an harmonious and homogeneous whole. This ensemble can only be achieved by applying two distinct systems of ornamentation. First, the plane decoration, that is, the ornamentation of flat surfaces; and the other, which has to do with the creation of forms and volumes and the erecting and disposition of chairs, tables, and other objects of three dimensions.

Plane decoration is purely ornamental and has no destination of actual utility. It is an agreeable complement, but not an indispensable complement. In a chair, as in all *meubles*, or objects of furniture, the essential point is form and volume and not

ornamentation. Ornament is merely recreation; form is a necessity. Whereas the decoration of surfaces is obtained by the distribution of lines and coloured masses, the creation of form requires rules of equilibrium, proportion, and last but not least, of usage or purpose. The one must satisfy under the one and sole aspect, the other under an infinity of varying aspects.

Plane decoration will permit a much greater latitude and a freer indulgence of the artist's fancy and daring. Much easier to treat by reason of expressing itself by simpler and more direct processes, it frequently yields a maximum of effects, though engaging a minimum of means. In this field ignorance has a chance to stumble upon accidental discoveries. Here the eye alone labours, but for the creation of forms, not only the eye but the mind as well is called to contribution. Arithmetic plays as great a rôle in the creation of a chair as does drawing, and this is where the decorator approaches the architect much more than he does the sculptor.

After a period of incubation, during which the artist thinks out his work, he arrives at the idea of it. This having become fixed in his mind, he must proceed with the material labour of giving it form. In passing from spirit to matter, he will

DECORATIVE ELEMENTS IN ARCHITECTURE

strive to copy his dream. Unlike the writer who has his pen, the orator who has his voice, the musician who has his violin, the painter who has his brush, or the sculptor who has his fingers, the decorator cannot himself translate and express that which his soul has conceived. He must appeal to others for the materialization of his vision, the conversion of his dream into reality. Here again he resembles the architect, who cannot himself construct and erect the edifices which he imagines and designs. The product of the decorator is less monumental than that of the architect, but not less difficult, and while he may not carve his own mouldings, weave his own tapestries, or chisel his own bronze, he should know how they are carved, woven, chiselled, and be familiar with the technique of each of the processes used in materializing his conception.

Chairs and Chairs

Nothing holds as large a place in our lives as the objects with which we people the rooms in which we live. Each chair and table and article of furniture has a subtle relativeness to our everyday acts. They belong to the family, help us to comfort, and in a measure reflect if not our moods, at least our habits and most of our attitudes. The furniture of a man's room reflects the char-



XXII. ARM CHAIR FRAME

It is indispensable for all seats to be solidly established

acter of the man, and what is said here of men applies even more forcibly to women. A little of our spirit, and even of our hearts, enters into these adjuncts to our daily existence and occupations. They are companions of our joy and mute witnesses of our griefs, and each in turn evokes a flood of memories.

Very marvellous is the impressibility of material surroundings to the lives which are lived among them. We build or we furnish a house to suit our own comfort and taste as it pleases us. We die and our sons inherit us and live their lives and maybe add rooms and furniture in accordance with their comfort and their taste, and so generation follows generation; and meanwhile, from all these lives something impalpable has been passing into the very walls, and in some mysterious way the whole house has become a reservoir of persuasive, even compelling influence. One is conscious of this influence even in an old house in which we dwell for a while as strangers and to which we are bound by no ancestry of occupation.

How much more powerful must that influence be when the house we inherit has been lived in by men and women of our own blood for centuries! Who has not vibrated to the stored courage in a noble name? An old house that has been bravely

and beautifully lived in has just this power of bracing influence; and for a man who possesses such an old home, to come back to it is to connect himself with a hundred currents of energizing and ancestral force.

What is more personal, more representative, than a chair or fauteuil? Among all *meubles* it offers probably the greatest inspiration, just as it offers the greatest difficulties. All furniture the purpose of which is to provide a means for the assumption of a sitting position, is subjected to a principle imposed by a physical attitude. It is not, therefore, the use, which never varies, but the destination and the character and requirements of the occupant which permit of the endless diversities of construction and design. Fundamentally, there may not be a difference in the actual act of sitting as performed by an emperor or a clown. There will be a tremendous difference between the throne and the stool. Except in the case where they form part of the architecture of the room, as for instance in the stalls of cathedrals, or the seats in an auditorium, chairs have a position and aspect more varied perhaps than any object of *mobilier* which like them have no predetermined character. A bed, a clothes chest, remain permanently in the attitude and on the spot which



XXIII. BOUDOIR ARM CHAIR

The difficulties in assembling the various component members of a chair grow as the chair departs from the straight line

they logically occupy, and consequently are never perceived in any changed aspect. Chairs, however, are moved here and there, disposed in profile or from behind or turned about and changed in their relation to each other and to the rest of the appointments, and for this reason have their appearance constantly modified.

The lines of a fauteuil or chair and its apparent equilibrium impose a serious task upon the designer, since at the least displacement from the preconceived attitude they may be made to appear unsymmetrical.

Besides this, the very service which we expect from *meubles* clearly designed for the accommodation of humans in a sitting posture appears to doom them to a sort of ambiguous attitude.

When they are unoccupied they are incomplete. They seem to await the performance of a duty or function. When they are occupied much of their lines and proportions is hidden. They either appear naked or overloaded. There is in this peculiarity a difficulty which many architects fail to solve. One must on the one hand give to his chair a comfortable aspect and yet must so arrange his skeletoning and scaffolding so that the chair when occupied will still show lines and supports that satisfy both logic and harmony. A chair

must be designed with the idea that its chief object is to accommodate a human body. Certain Greek and Roman chairs which have come down to us are wonderful examples of the concern of the designer for this essential requisite. It is as necessary to-day for the designer of a chair to proceed from an anatomical conception of a chair's occupant as it was two thousand years ago.

The conception of a seat, no matter what particular flavour the spirit of the age, the country of origin, or the customs of its occupants have given it, must be analyzed in every detail and constructed upon formulæ based upon a precise technique. From the abstract idea to the full realization, a seat will develop problems for the solution of which not only good sense and good taste are required but deep knowledge. The closer the union between rationalism, comfort, and beauty, the greater the labour in drawing and plans, cross-section, projection, design, assemblage, and ornamentation. The very texture of the wood will furnish matter for consideration. A chair that is built to please the eye alone has fulfilled but part of its mission. Unfortunately too many chairs are built with this consideration of appearance predominating. Chairs that are made to sit in should take into account the exact measurement



XXIV. ENGLISH HALL

A decorative ensemble involves the architectural disposition the composition, colouring, and formation of the meubles, tapes-tries, rugs, lighting fixtures, the invention and arrangement of an infinity of units, all working toward the realization of an harmonious and homogeneous whole

in inches of the angle formed by the knee and sole of the foot of its intended occupant. Seats differ in their distance from the ground because the length of the tibia varies in human beings. The distance between the elbow and the shoulder must affect the height at which the arm of the chair is set from the seat. Even when the covering is of Beauvais or Aubusson tapestry, the anatomical considerations that make of it a chair should govern its structure.

Richness of covering never can make up for poorness in outline or design.

Because of the delicacy of their structure it is indispensable for all seats to be solidly established, since they have to resist two forces, — that which we impose upon them by reason of the weight of our bodies, and that which we cause them in moving them about and knocking them against various fixed obstacles. The lighter the chair, the more solidity will it require.

Because of these contradictory needs a chair becomes a difficult *meuble* to construct, since it must offer the maximum of resistance combined with the minimum of material. Thus, every chair is a skilful combination of the minutest elements united in one effort. Every fauteuil, with its fore feet in faultless perpendicularity, and its hind legs curved

like buttresses, has need of every rung and every inch of counterbalancing curve of its spine to accomplish its mission of stability and force. One of the chief considerations lies in the study of the texture of the wood itself. The chair architect will not be satisfied with his drawing of his chair, but will insist when the same drawing comes to the point of materialization in wood, that the craftsman entrusted with the work will be guided by the grain of the wood, and will not juxtapose two fragments in which the filaments run in opposing directions.

The difficulties in assembling the various component members of a chair grow as the chair departs from the straight line. The more curvature there is, the more necessity exists for the strengthening all the joints and elbows. The slimness frequently given to the legs of a chair must be paid for in an added thickness at the waist of the chair, but this obesity is easily masked by bringing down the fabric with which the chair seat is covered over a portion of the wood constituting the skeleton of the seat, thus making it appear one half or one third even of its real thickness.

The fact that most of the wooden carcass of chairs is covered over with textiles of some de-



XXV. LOUIS XIV MORNING ROOM

The furniture of a man's room reflects the character of the man

scription, or with leather, limits the area which might be decorated by wood carving. For this reason, the chief merit of a chair must always be in its profile or architectural construction. The bare skeleton of a fauteuil or sofa is nevertheless susceptible of enrichment by carving, but this must be done with moderation and necessitates the greatest restraint and soberness. Marquetry and application of bronze ornaments may also be resorted to with success. The wood-carver who attempts to cut an ornament into the apparent wood of a chair must be careful that this decoration will not lap over a joint, since the difference of texture of the wood and the line of cleavage will cut the decoration and mar its effect.

In the matter of covering, both in leather and tissues, the artist will have a wide range in which to exercise his choice. The lavishness observable in the leathers illumined by artists of Cordoba during the Renaissance has not been maintained, but leather lends itself to many chromatic treatments, and the effects obtained through gilding or staining or the artistic contrast of leathers of different shades or colouring are highly decorative.

The covering of chairs with textiles of silk or wool, or any of the twenty or more fabrics in current use, does not present the difficulties that

DECORATIVE ELEMENTS IN ARCHITECTURE

leather does. All that is necessary is to select a pattern that will not clash when disposed in two directions. A high form of ornamentation consists of weaving the material to fit the space which must be covered, thus making the ornament fit the form which it is intended to decorate. In this consideration it is an artistic solecism to cover the seats of chairs with tapestries containing a pictorial motif. A tapestry panel representing the idyl of "Sylvia and Clytandre" is meant to be admired as a picture and not to be sat on.

Of late there has been a reaction against the use of heavy fringe and tassels, and a sober silk band is used to cover the junction of the covering with the wood. This is not to say that all *passementerie* is taboo, but its use has been abused in the past, and the tendency toward simpler appointments is in the right direction.

In view of the fact that chairs are presented to the eye from every angle, and as frequently from the back as from the front, it is extraordinary that so little effort in the past has been made to give the rear of the seat the care and finish bestowed on the fore part. It might be excusable to cover the back of a sofa, absolutely certain to remain against the wall, with rough, plain fabric, but when the sofa is likely to be disposed in the



XXVI. CABINET—SPANISH SCHOOL

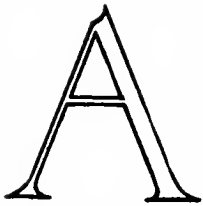
The product of the decorator is less monumental than that of the architect, but not less difficult

GUESSING AND KNOWING

centre of the room, or where it may be viewed from behind, common sense dictates that the back be finished as carefully as the front, and as much decorativeness be given to it as is attempted with the rest.

CHAPTER IV

THE INHERITANCE OF THE PAST



T all periods of civilization there has existed a keen curiosity of the past. Every building that ever existed, of which the design is of architectural importance, owes its form and its detail to something less complete which has preceded it. Man has ever felt the need of reintegrating life into what was death, and this effort has succeeded only because there has existed to guide him the noble remnants of the works of earlier architects. Nothing that is beautiful ever dies, and one of the most uncontrovertible axioms is that all art which is not based upon tradition is doomed to death.

Let it be set down at once that this truth is not the rallying cry of the reactionary, or even of the conservative in art, but rather of the liberal who has observed that all the large innovations, that every movement which has had some element of novelty in art, have been always the result of a sure and orderly development of tradi-



XXVII. BOULE CLOCK

A form must be beautiful in itself. The artist can never hope to overcome its imperfections by means of applied decoration

tion and never of a sudden revolution or of a volcanic eruption of individual genius.

The full significance of the word "tradition" will be realized by some such definition as that it is to artistic progress what the military base is to the march forward of an army.

A military unit, isolated, and which has lost touch with other forces and with its source of supplies, is in grave danger of failure by reason of its isolation. If, on the contrary, this unit is in contact with, and supported by, a well-organized base from which it can uninterruptedly draw food and munitions, it will have every chance of success and be in a position to contribute effectively to the general advance.

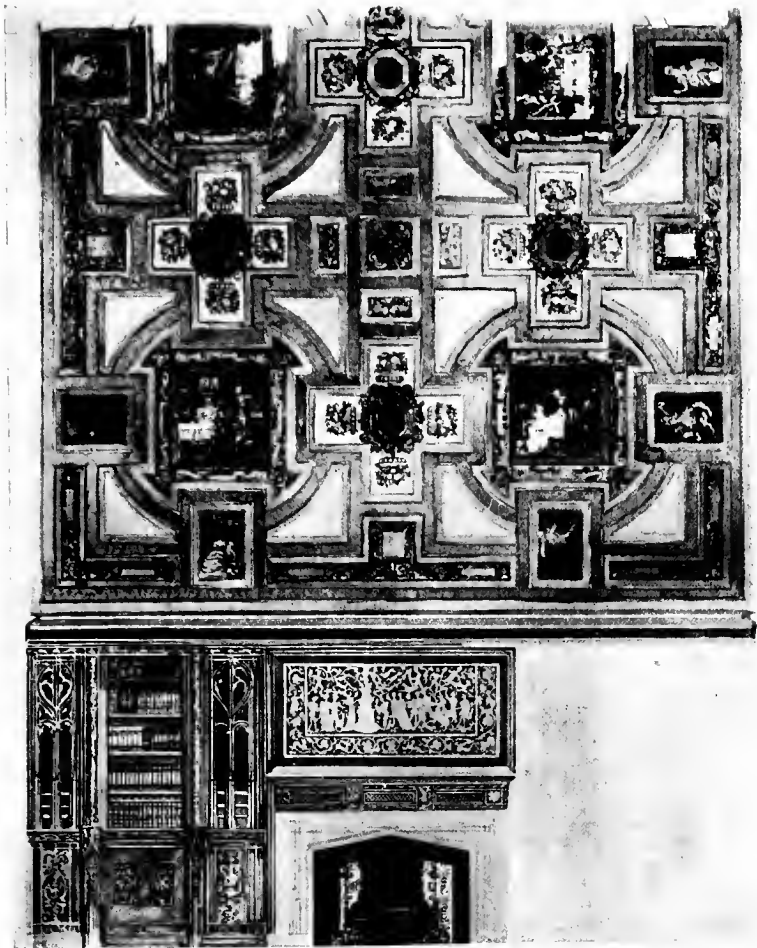
It is the same with art: the detached isolated effort will remain unproductive, while the effort which springs from a base of sound tradition will move forward with success.

When we have found the earliest example of a special architectural feature we are still a long way from the root and inspiration of this particular feature. Men have at times indulged this cult of the past to excess, and their admiration for things that no longer are has been known to blind them to the point of being reduced to finding the principle of art solely in imitation. This

tendency has brought many recurrent periods of decadence, because although imitation does bring a valuable element to art — the element of education — it should not be its sole guiding principle.

The artist or architect who manifests individuality in his work, and succeeds in giving to his period some new element of variety, is subject, and has been subject, no matter how individual he may seem, to the environment in which he lives, and is by reason of this the expression of the civilization of which he is part, and of the *milieu* in which he moves. The lessons which he will have learned, the visions which he will have seen of art as expressed by his predecessors, the language, the beliefs, the religion, the philosophy of the people all about him, the very air which he breathes, must affect his mentality and must be reflected in the work which he executes. His individual development will inevitably be the reflection of the general development all about him.

Art, therefore, while giving free rein to the imagination, inventiveness, and originality of the artist, imposes upon him strict rules, which generations before him have proven to be salutary and beneficial. In the history of art, ornament is the complex application of simple principles, and the result of conformation perpetuated by tradition.



XXVIII. CARVED OAK ROOM

The condition of beauty is made up of many elements

The first of these is symmetry

[Transition Gothic — Renaissance one-half of ceiling shown
 — each panel a subject — each picture painted on canvas —
 ornamental sections in low relief painted in colours]

Among the innumerable art productions which surround us, the old primitive types recur constantly. They are the basis of decoration and will live eternally. The most rabid advocate of originality must pause before the wonderful perfection achieved in the architecture of the Greeks of the fifth century B.C., and admit that here, at least, imitation imposes itself. We are here in the presence of an architecture in which the details are deliberately shaped and refined, in accordance with an acute intellectual perception, to produce and present their most complete effects upon the eye, in which every detail is the realization of an abstract conception of order, form, and proportion, and in which the hand of the artist has been guided by reason and logic.

The condition of beauty is made up of many elements. The first of these is symmetry, which by requiring a central point, around which the different parts are disposed in a predetermined and regular order, brings forth a condition of unity. No edifice, no matter how vast, or how various the decorative elements used to embellish it, will be absolutely beautiful, if this essential quality of unity is lacking. Another element, no less essential to beauty, is form. In decorative art one of the principle axioms is that a form must be beau-

tiful in itself. The artist can never hope to overcome its imperfections by means of applied decoration. Form is the principal agent of expression because it carries in itself the imprint of the personality of the artist who has created it.

From the earliest civilization, nature has provided the chief inspiration for art. Never can we appreciate sufficiently or admire enough the infinite resources which art can draw from nature.

“Consider the lilies of the field, how they grow. They toil not, neither do they spin. And yet Solomon in all his glory was not clothed as one of them.”

The Egyptians went straight to nature for the inspiration of their chief ornament, the lotus. The Greeks of a later period adapted the acanthus leaf to their decorative needs, and the artists of the thirteenth century in creating the gorgeous monumental flora of the period were altogether inspired by plant life.

It is not enough, however, to have found a model. In making use of the subject which nature provides, the artist should avoid servile imitation of the model. He must not take the body without the soul, or copy the letter without the spirit. The vegetal ornament must be interpreted and conventionalized. They therefore must be idealized



XXIX. ENGLISH CLOCK

Another decorative element typical of the Greeks is the flute or furrow with which they channelled their columns

and the flowers adapted to existing conformations. There is a plastic side to all vegetal growth, and the artist inspiring himself from a flower or leaf must take from it its typical characteristics and the very quintessence of its lines. Ornament absolutely demands stylization.

Take any tree in foliage and notice how the extreme branches have disposed themselves so that the smallest twigs and shoots can breathe freely without crowding, how each is separated from the other with mathematical precision.

This phase permits imitation, almost permits copy; but take other aspects of the same tree, — the tortured lines presented by the trunk and gnarled branches of an old apple tree, for instance. These will offer no element of decoration in their outline alone. The tree may present a picture of desolation, of strength and suffering, susceptible of evoking an artistic thought; but taken as the basis of an ornament it is not available, because of its lack of symmetry. The artist, therefore, should he imitate, must transform. In taking a growing plant or flower for a model he must carefully analyse his model and determine its exact constitution. He must interpret the form, and while making use of the details furnished by nature, must modify them in order to constitute

an ornamental motif, bearing the stamp of his personality. Whereas, in order to transform the outline presented by nature into the outline to be given the ornament, he will find it indispensable to study the law which governs the juxtaposition of each part in order to unite them and separate them in accordance with logic, he must note the ensemble of the plant, its attitude, and position; he must enter into its details, taking first the stem, then the leaves, their shape and mode of insertion upon the stem, which he will find never depends upon chance but is always governed by a determined law. In analysing flowers he will study not only the blossoms by themselves, but their mode of groupment and their various aspects as they pass from bud to flower.

In adapting the lotus and papyrus growing along the banks of the Nile to the decorations of the temples of their gods, the palaces of their kings, and the coverings of their persons, the Egyptians were ever respectful of natural laws. The lotus carved in stone forming the graceful termination to a column, or painted on the walls of a temple or palace, was never such as might be plucked, but an artistic representation adapted from the model for the purpose it had to fill, and yet sufficiently resembling the type to call forth



XXX. WATER COLOUR DRAWING FOR TAPESTRY

In taking a growing plant or flower for a model the artist must carefully analyse his model and determine its exact constitution

the poetic idea which it was sought to evoke without shocking the sense of consistency.

The Greeks also were always close observers of nature, and although they did not copy or attempt solely to imitate, their designing was done with the model provided by nature held constantly in mind. The three great laws which we find demonstrated in all vegetal growth—radiation from the parent stem, proportionate disposition of the areas, and the tangential curvature of the lines—are scrupulously obeyed, and it is the unerring taste and distinction with which they are obeyed which excites the admiration.

The first notion of symmetry, arrangement, disposition, the distribution of masses, and the formation of patterns by the equal division of similar lines were probably imparted to the earlier civilization through the art of weaving. The Egyptians do not seem to have gone beyond the geometrical arrangement, and it is very seldom that we find them utilizing other than straight lines.

The decorative elements of earlier ages, no matter from what section of the globe the examples are drawn, were almost exclusively rectilinear. They began with parallel lines of various thicknesses and drawn at various intervals. Later the straight line developed into the zigzag, or saw-

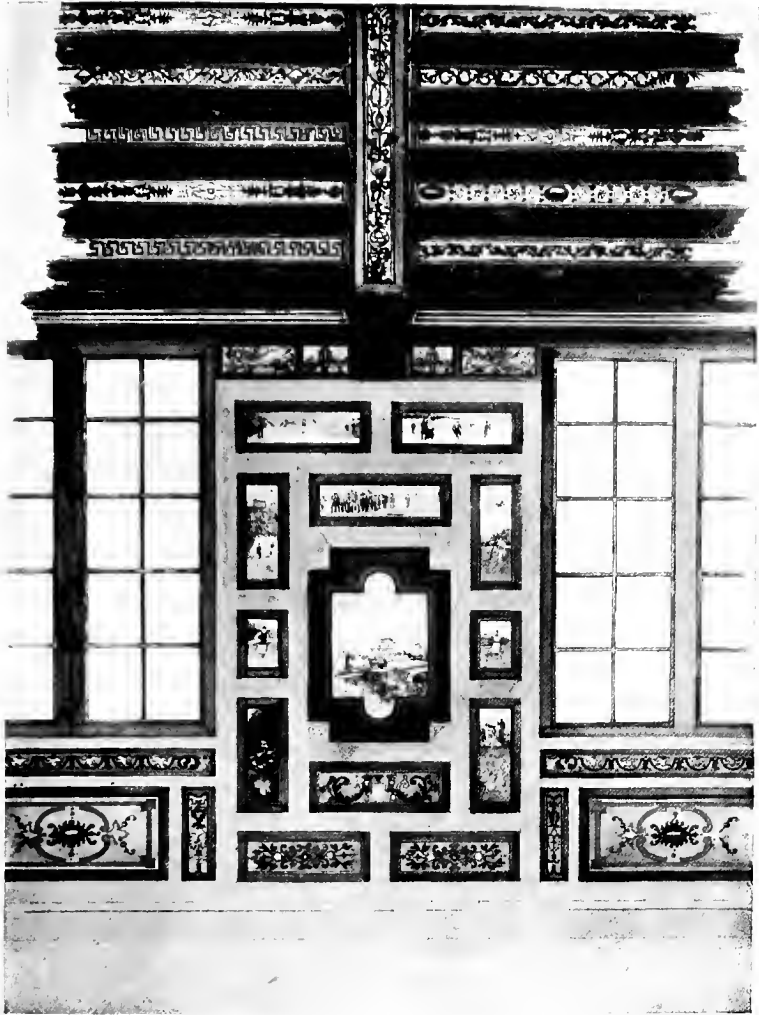
tooth outline, and this broken edge, while very simple, succeeded in producing an effect frequently very striking. In its next manifestation this saw-tooth edge became the chevron, which consists of two lines in zigzag, repeated in parallel. This design shared with the fret and various arrangements of diapers, arranged in squares or diagonally, a vogue which has subsisted to this day. The cross in its various aspects, such as the Greek cross, the cross of St. Andrew, and the Swastika, was not only used as an emblem, but also as an ornament. The disposition of tablets, rectangular or square, is another form of rectilinear ornament, which recurs in every style of architecture. Of the same character are the square spaces between the triglyphs in Greek Doric temples filled with thin stone slabs and called metopes. Occasionally this tablet takes on the form of a flattened pyramid, and becomes known as a diamond. Under this aspect it is very frequently found in Florentine decoration. The Greeks and the artists of the Renaissance also used caissons or compartments framed with mouldings of which the sunken interior is decorated with sculpture.

Another decorative element typical of the Greeks is the various hollows or flutes with which they



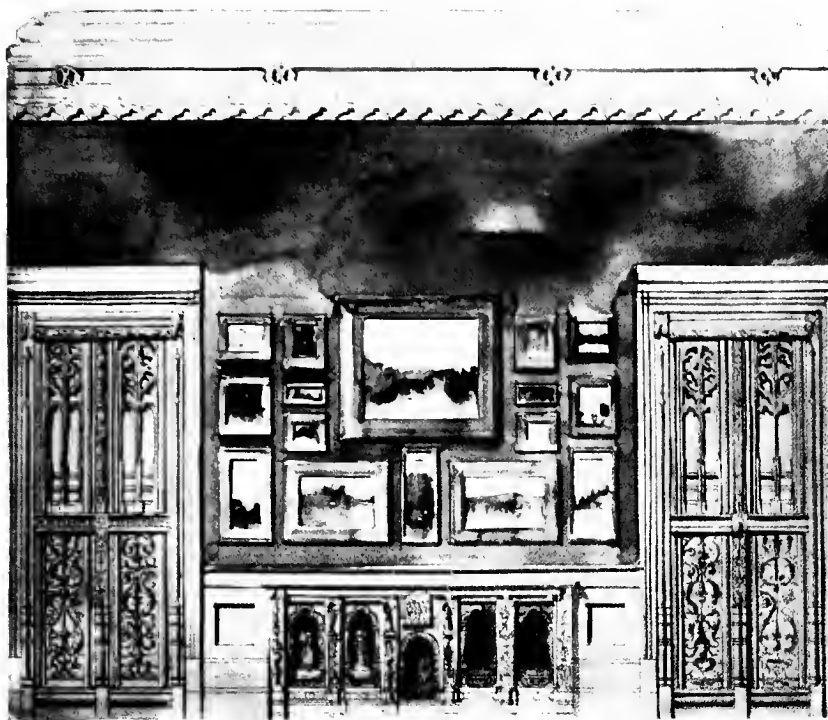
XXXI. WRITING TABLE, LOUIS XV BOULE

The production of the artist must not clash with the idea of equilibrium



XXXII. UNIVERSITY CLUB, REMODELLED HALL TO PRIVATE
DINING ROOMS

In forms of two dimensions, the chief requisite is that of a
pleasing outline



XXXIII. LIBRARY—EARLY XVI CENTURY

An ornamentation can be symmetrical following any number of axes



XXXIV. LOUIS XVI INLAID DESK

In objects having three dimensions form must satisfy two essential conditions: a good proportion and a good profile

channelled their columns as well as other structural forms. What has since been known as the Greek key or fret is also of very great antiquity. It appears to be an imitation of the volute, rendered in straight lines. It permits of many variations and modifications; as many as eight distinct variations have been in current use. Another favorite ornament based upon rectilinear principles is the dentil, which probably owes its origin to the imitation of the lines of rafter ends projecting below a cornice. The effect is that of a series of square blocks. It is generally used to break up the density of a shadow.

CHAPTER V

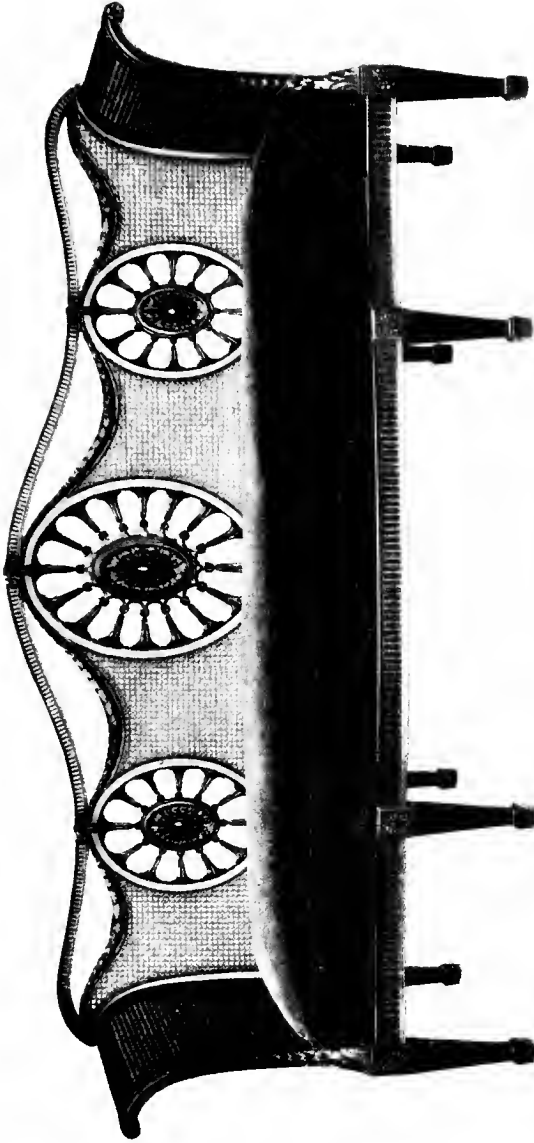
PRINCIPLES AND ESSENTIALS

IN outlining certain general principles, it might be set down as law, that all works of architecture and of decorative art should possess fitness, proportion and harmony, all of which make for repose; that all ornaments should be based upon geometrical construction and that harmony of form consists in the proper balancing and contrast of the Straight, the Inclined and the Curved.

The production of the artist must not clash with the idea of Movement, or the idea of Speed, or the idea of Force, or the idea of Equilibrium. A chair has four legs because five would be too many and three not enough.

All movements, no matter how instinctive, or derived; can be reduced to two or three fundamental movements; the rectilinear movement, the circular movement, and a third, which appears composed of a combination of two movements; the screw or spiral.

Decorative art is constituted by the assemblage



XXXV. ENGLISH SOFA

Not only must an object be stable, it must appear stable

of conditions which can be resumed under three heads: first, form; second, relief; third, color.

The fundamental principles of decoration are Relief and Color.

The decorative Artist must draw his ornaments from his imagination, from geometry or from the works of man or nature.

Decoration is either inherent to Form or else superimposed or added thereto.

In theory, Form can be divided into three dimensions: height, width and thickness. Distinction is made of forms in which only two dimensions are apparent, height and width, and where thickness has no particular interest.

In objects having three dimensions, form must satisfy two essential conditions; a good proportion, and a good profile.

The first principle of a good proportion is that one of the elements of the form must predominate.

In forms of two dimensions, the chief requisite is that of a pleasing outline. Here, also, the intention must be firmly declared. A square must have its sides rigorously equal and its angles exactly straight. On the contrary, a rectangle must have its length and width very different. A circle should have but one centre and an oval be greater in length than in width.

DECORATIVE ELEMENTS IN ARCHITECTURE

Added to these essentials must be the quality of stability. Not only must an article be stable, it must appear stable. As a general principle it is better to allow the form to remain naked than to cover it with ornaments which add no interest to it.

There are three general methods of applying decoration. The first is to represent the decorative elements as they exist in Nature, or as the artist believes them to exist. The treatment of these elements, however, demands the artifice of arrangement in the location of the principal motifs; the balance of the various outlines, and the pleasing distribution of masses. Mural paintings, frescoes, tapestries, etc., partake of this method.

The second method consists of utilizing natural elements, but placed in a conventional surrounding. The principal motifs, for instance, can be outlined against a gold background. The laws of gravity are still observed and the figures are upon a solid base. The third method is purely conventional. The motifs retain the typical characteristics of form, but appear applied or nailed or affixed with or without background and without apparent relief.

Besides the models which the vegetal or animal world provides to the decorative artist, he has at his disposal innumerable objects derived from



XXXVI. LOUIS XV CABINET

If the surfaces are of irregular outline in the sense of elevation the same inequalities must govern the divisions and correspond with the variations of the form



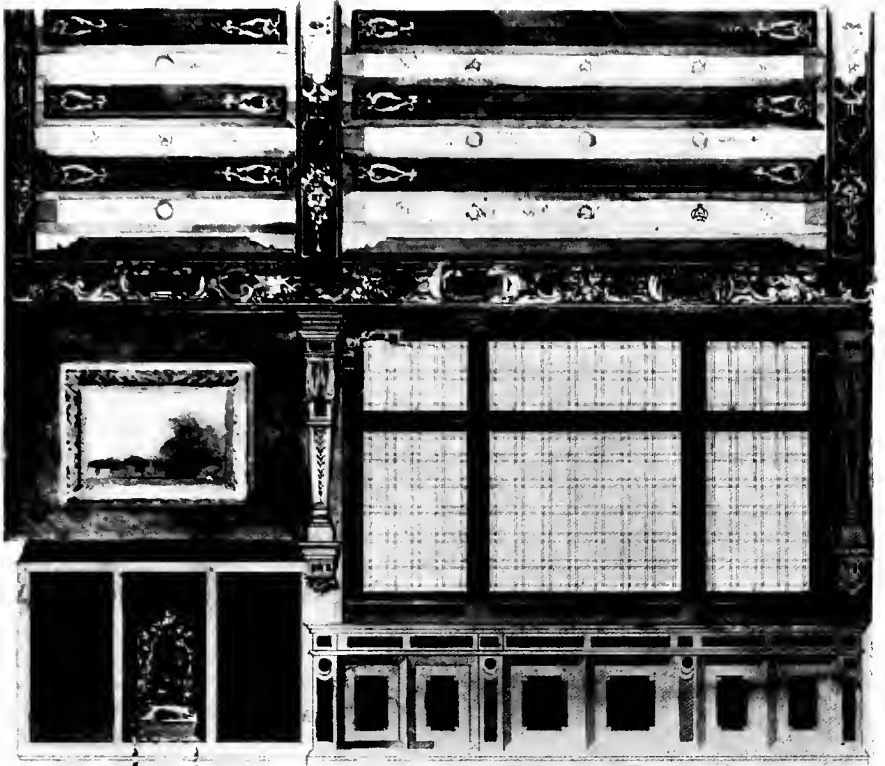
XXXVII. LOUIS XIV CHAISE LONGUE

It is better to allow the form to remain naked than to cover it with ornaments which add no interest to it



XXXVIII. CABINET, LYONNAISE SCHOOL, XVI CENTURY

The symmetrical mode can be either absolute or relative. When absolute, the motifs will be rigorously alike, but disposed inversely upon each side of an imaginary line or axis



XXXIX. RENAISSANCE DINING ROOM

Divisions in the latitudinal sense are only optional when they divide a form which is regular in outline

human invention. In making use of these, however, and bending them to his artistic needs, he must exercise his artistic sense. In arranging, let us say, a trophy of musical instruments, he will naturally select those of which the outline is fundamentally simple. The lyre, the tamboureen, will lend themselves much more to his requirements than the trombone or the bass tuba.

There are two methods open to the artist for the ornamentation of form: symmetry and irregularity. The symmetrical mode can be either absolute or relative.

When absolute, the motifs will be rigorously alike, but disposed inversely upon each side of an imaginary line or axis. When the Symmetry is relative only, the motifs remain similar, but the details no longer are alike.

Let us take, for example, a rectangular panel, the cover of a box.

One simple manner of ornamenting this surface would be to cut out from some already executed decoration a rectangular area of a size to fit this cover. This, however, would vitiate the principle that the artist must adapt the ornamental forms which he uses to the space which he has to decorate. It would be rather in the nature of a patchwork, and not decorating in the truly artistic sense. It

DECORATIVE ELEMENTS IN ARCHITECTURE

could as well be applied in ornamenting a circle or triangle, or any other form besides a rectangle.

Confronted with the necessity of composing the ornament especially to fit each distinct form to be decorated, the artist having this rectangular panel to decorate must choose to do so either in a symmetrical manner or in an irregular manner. The symmetrical manner may be subdivided into Perfect Symmetry, Partial Symmetry, False Symmetry and Symmetry upon a non-symmetrical background.

An ornamentation can be symmetrical, following any number of axes.

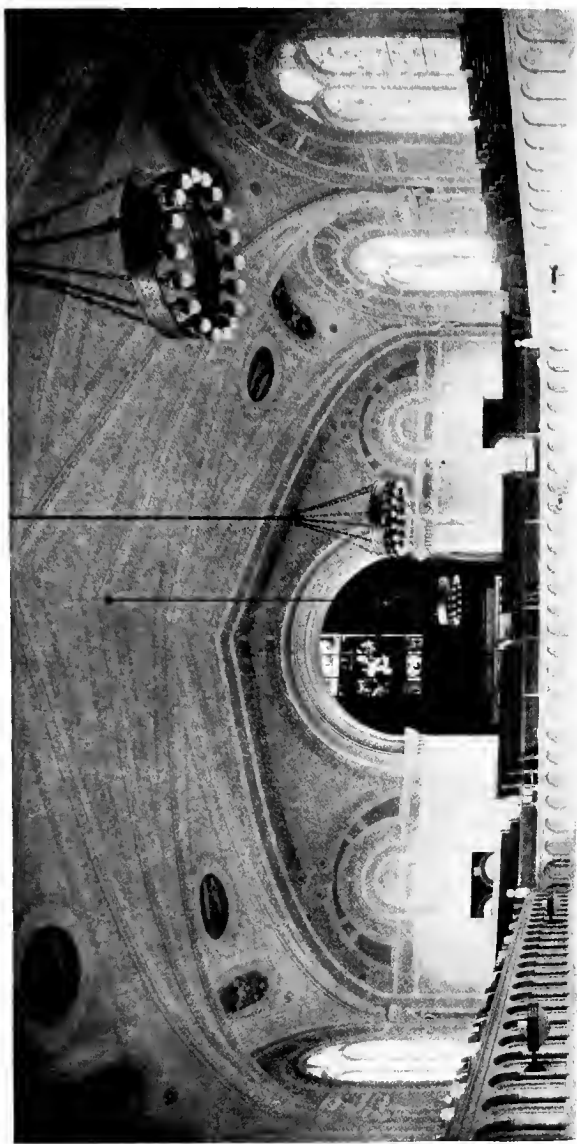
Having selected the mode to be employed, the artist will have to consider the division of his surfaces. Thus the general division of a rectangular panel will depend upon horizontal or vertical lines. The division of objects which have been turned, such as vases, candelabra, columns, etc., must be traced according to the cross-section or by circular horizontal lines. Forms that are flat, but of a curved outline, such as dishes, fans, discs, etc., must rely upon divisions that are concentric or which radiate.

Divisions in the latitudinal sense are only optional and at the fancy of the artist, when they divide a form which is regular in outline. If, on the contrary, the form has a profile which goes widening



XL. EMPIRE ARM CHAIR

Decoration is either inherent to Form or else superimposed or added thereto



XLI. FIRST PRESBYTERIAN CHURCH AT WATERTOWN

No matter what form of division is adopted, uncertainty must be avoided. It is essential to affirm and emphasize a perfect similarity or a notable difference



XLII. CEILING PANEL

An ornament happily disposed within a circle cannot be applied
equally well within a square



XLIII. CARVED WOOD PANEL AND DOOR

If the decoration involves a sequence of curved lines, rectilinear elements used sparingly create a pleasing contrast

and narrowing, these divisions must of necessity be unequal and one among them must be chosen as the dominant one and emphasized. It is an artistic solecism to dispose upon such surfaces equal divisions, since they must of necessity clash with the unequal profile.

As for longitudinal divisions, they can only be at the option of the artist when they are applied to forms with a continuous profile or to surfaces with outlines that are regular in elevation; each of these divisions becoming thereby a section of the same nature as the others, as, for instance, a circle within a plate. If, on the contrary, the surfaces are of irregular outline in the sense of elevation, the same unequalities must govern the divisions and correspond with the variations of the form.

No matter what form of division is adopted, uncertainty must be avoided. It is essential to affirm and emphasize a perfect similarity, or a notable difference.

One of the chief influences in the application of ornament is the dominant sense. It is preposterous to suppose that a motif, no matter how artistic per se, can be adapted indifferently to the first form that presents itself, flat, turned, concave or convex. An ornament happily disposed within a square cannot be equally well applied inside a rectangle or a

circle, nor can it pass from a flat surface to the swelling side of a vase or column.

As a general principle, each ornament must be composed and studied for the particular form which it is to decorate.

In a plain surface, such as a rectangular panel where the dominant sense is vertical, it is essential to dispose the decorative composition following vertical lines. In a horizontal panel, the lines of decoration will be disposed in a horizontal direction. When the plane surfaces are circular, the decoration must take on a curved character. The principal lines of the design must approach the edge at a tangent, or follow it in a parallel.

Surfaces with double curves, concave or convex, exercise a particular restraint upon the decorator. Here perfect concord is required. The Greek Egg and Dart and the Leaf and Tongue mouldings were designed to respond perfectly to the profile to be covered. The Egg and Dart adapts itself marvelously to the quarter-circle, whereas the Leaf and Tongue fits the talon. It is for this reason that these two mouldings have remained and ever will remain the highest form of Classicism.

Another consideration which the decorator must keep constantly in mind is the error of vision to which the eye is subject. It is easy either to flatten



XLIV. CARVED OAK MARRIAGE CHEST

In a plane surface, such as a rectangular panel where the dominant sense is vertical, it is essential to dispose the decorative composition following vertical lines.



XLV. ORIGINAL DRAWING FOR MORNING ROOM
The artist must adapt the ornamental forms which he uses to
the space which he has to decorate



XLVI. COLONIAL HALL RESTORATION

It is easy either to flatten or heighten an object, at least apparently, by decorating it with lines either horizontal or vertical



XLVII. PAINTED SCREEN

When the symmetry is relative only, the motifs remain similar
but the details no longer are alike

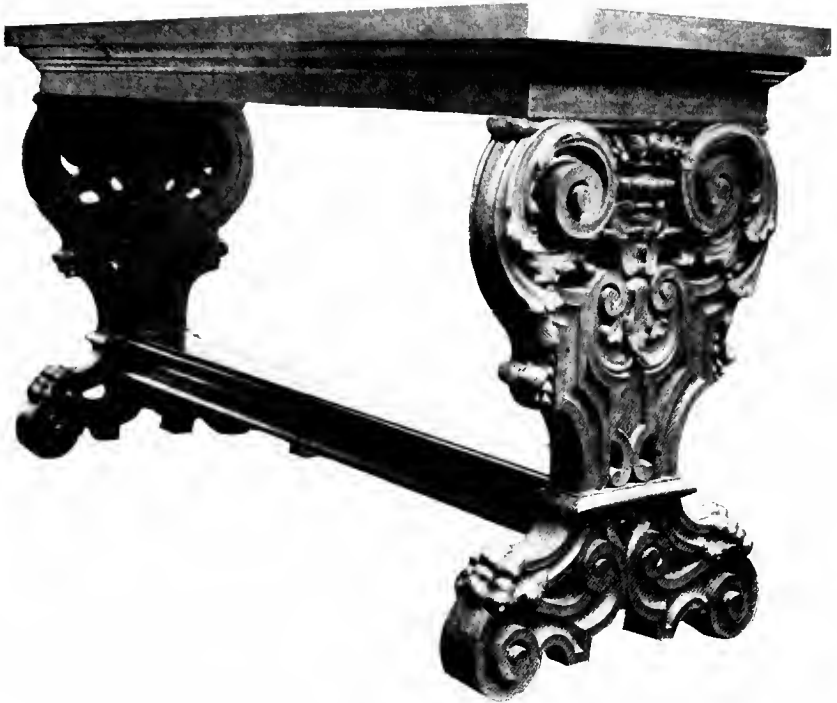
or heighten an object, at least apparently, by decorating it with lines either horizontal or vertical. A rectangle covered with pronounced lines running parallel with one of the sides will appear to lengthen in the direction of that side. A circle ornamented with parallel lines of the same character will appear to transform itself into an oval. A room can be made to appear much higher in ceiling when papered with stripes running vertically than when papered with stripes running in a horizontal direction. The Greeks were so conscientious on this score that in designing the columns of the Parthenon, for instance, they gave to them an almost imperceptible, yet readily-measured, outward curve from base to necking; the departure from the straight line being about .07 of a foot in the height of the shaft of the column — 32 feet.

This entasis is just sufficient to correct the tendency of a straight-lined tapering column to look hollow to the eye. The height, nor the diameter, nor the number of vertical hollows or flutes which channel them, are accidental. The Doric Column of the best period of Greek Architecture has twenty such flutes, because this number has the advantage of bringing a projecting edge under the angle of the abacus, and the centre of the hollow of the flute under the centre of the abacus; thus giving a

relation in design between the column and the abacus. Nor does the refinement of design stop there. The sections of the flutes are approximately elliptical. They are such for the purpose of giving emphasis to the light and shadow of their edges. Again, in order to counteract the known tendency of a square building with vertical walls to look rather larger at the top than at the base, the axes of the Parthenon columns are all very slightly inclined inwards so as to produce a pyramidal effect, more felt than seen. The same study of optical illusions caused the architects of this noble pile to give a slight upward curve to the lines of the cornices and steps at the base. The necessity for this arose from the effect of the raking lines of the pediment, making the straight cornice under them appear hollow. The angle columns were made slightly thicker than the rest; as objects tend to diminish in apparent size when seen against the light, as compared with similar ones, not so presented.

The conclusion is always permissible that decorated form possesses only those proportions which it seems to possess, the influence of the ornament, interior or exterior, being such as to modify entirely the appearance of the object.

The only elements of decoration are the straight



XLVIII. RENAISSANCE HALL TABLE

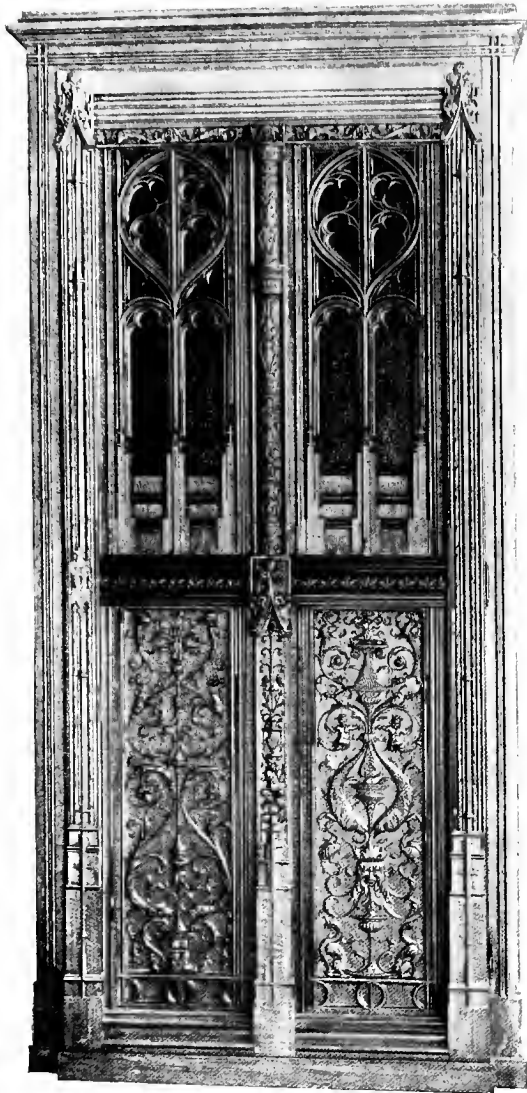
The artist is confronted with the necessity of composing the ornament especially to fit each distinct form to be decorated



XLIX. LOUIS XIV REGENCE COMMODE
An example of perfect symmetry



L. TRANSITION GOTHIC ARMOIRE
EARLY XVI CENTURY



LI. ARMOIRE— TRANSITION GOTHIC TO
RENAISSANCE XVI CENTURY

Perfect symmetry above and false symmetry below

line and the curved line. On general principles it is difficult to employ one exclusively. The use of the straight line, for example, would cause not only monotony, but stiffness; whereas the use of the curved line alone would result in flabbiness and loss of character. If a composition presents a succession of parallel straight lines, such as an entablature, it will be advisable in decorating it, to introduce certain curved details, to bring variety and suppleness.

If, on the contrary, the decoration involves a sequence of curved lines, either parallel or concentric, the rectilinear elements, used sparingly, create a pleasing contrast.

As a general principle in a decorative composition, the straight line will be used for the general structure. It will provide, in addition to the imaginary axis, uprights, supports, frames and compartments, upon which the curved line, more graceful, can rest in the form of arches, consoles, etc.

Another consideration is the decorative scale based upon the human stature. No matter what the dimensions of a building, certain elements must always retain the same height, as, for instance, steps, benches, tables, etc.

In every-day utensils, the same consideration is apparent, as witnessed by the size of the hilt of

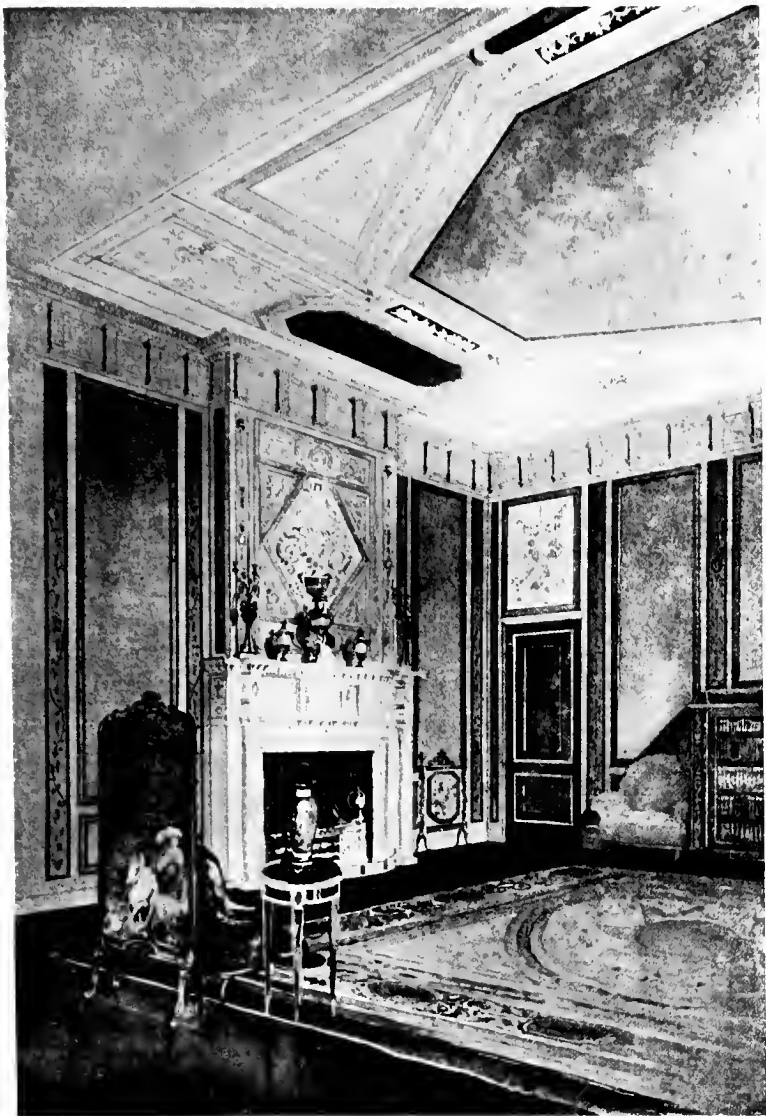
DECORATIVE ELEMENTS IN ARCHITECTURE

a sword, the handle of a cup, the stem of a glass, etc.

Parts of decorated objects should also be in scale reciprocally. The rungs of chairs of the same dining set should correspond to the mouldings of the table of this set; and the various pieces of a tea service should all be in scale, as must a cup to its saucer.

In considering the degree of variation and repetition and the disposition of an ornament repeated, care must be taken that intervals left between ornaments thus repeated differ as much as possible with the decorated space. The spaces between flutings, for instance, should not be of equal width to the flutes. In hangings and wall-papers decorated with stripes, the ornamented stripe should be separated from the next ornamented stripe by a plain stripe, narrower or wider, but not the same in width, as the ornamented stripe.

The law of contrast should also govern the disposition of moulding. As a general principle in Architecture, as in cabinet work, the decorator must avoid the juxtaposition of two ornamented mouldings, and always be careful to separate them by a plain band or fillet.



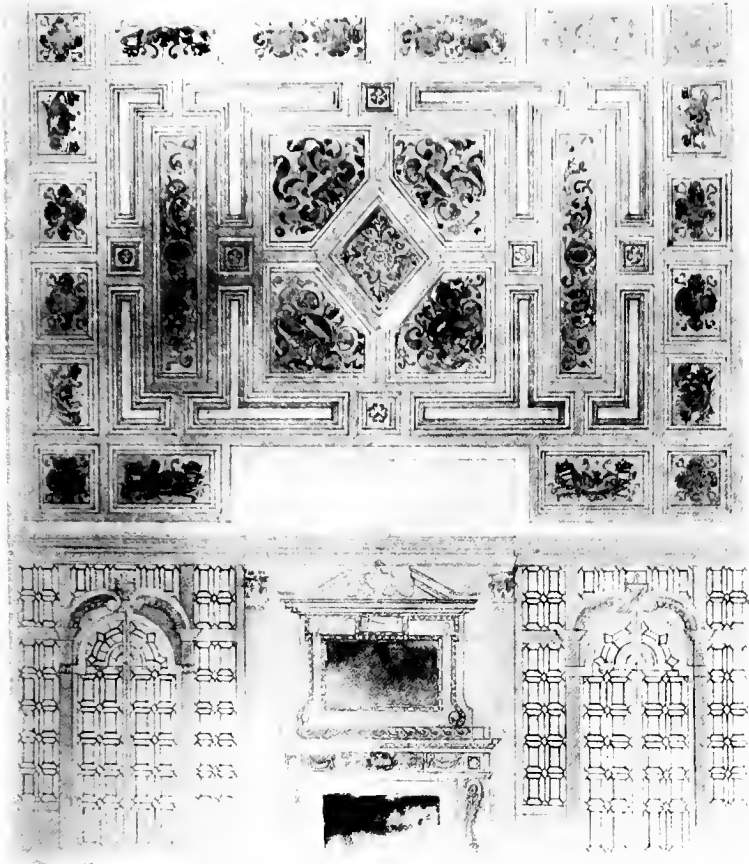
LII. ORIGINAL DRAWING FOR A SALON

All works of architecture and of decorative art should possess fitness, proportion, and harmony; all of which make for repose



LIII. LOUIS XVI COMMODE

The first principle of a good proportion is that one of the elements of the form must predominate



LIV. DINING ROOM PROJET

All ornaments should be based upon geometrical construction

CHAPTER VI

THE DEVELOPMENT OF ORNAMENT

BEFORE taking up the ornaments based upon curvilinear principles, it may be well to consider a few conventional motifs, characteristic of Greek art, where the perfection of pure form is developed to a point which has never been surpassed.

The most familiar of these motifs is the egg and dart moulding. Although some attempt has been made to trace the origin of this moulding to the lotus bud of the Egyptians, the well-known tendency of the Greeks never to be realistic in their imitation of nature rather disposes of this theory. The best Greek moulding ornamentations imitate nothing. They represent only the abstract quality of repetition and contrast.

The egg and dart, and the leaf and tongue, which may be considered a derivative, demonstrate how very careful the artists of that golden era were to fit the ornament to the form. The lines of the egg and dart will always be found to present, when seen in elevation, a curve similar to that

formed by the section of the moulding on which it is carved. The leaf and tongue was evolved out of the egg and dart, out of this consideration, to wit: to meet the necessity of ornamenting a symma-reversa moulding, or one having a double outline.

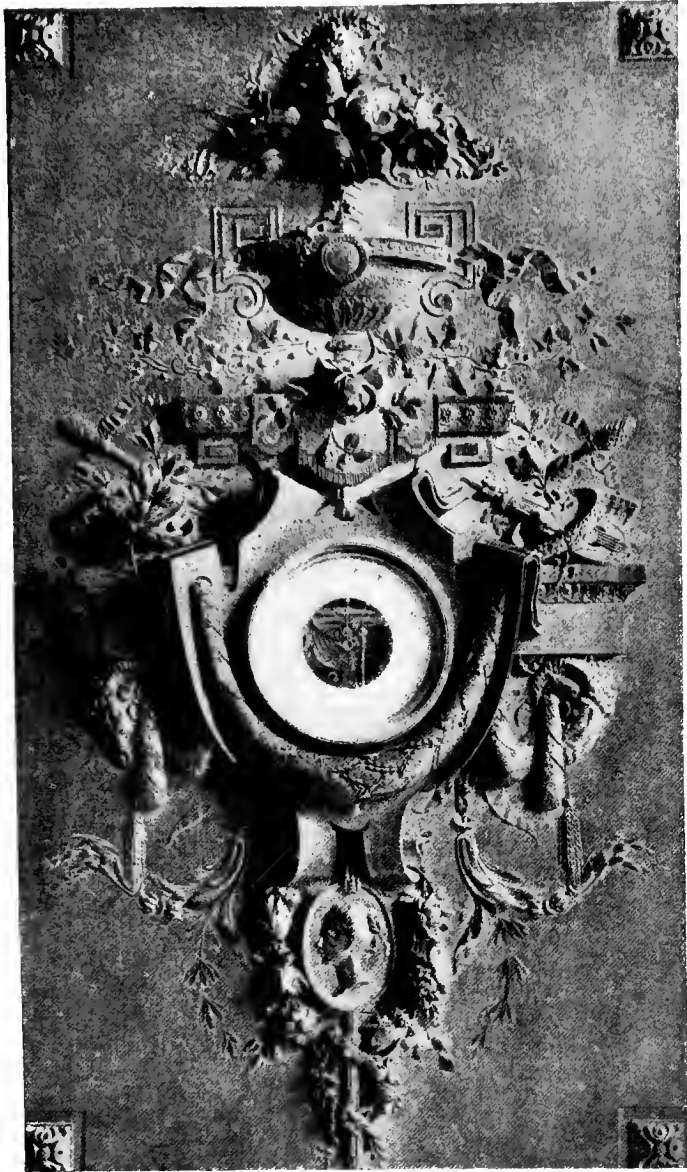
Among the conventional Greek ornaments, the nearest approach to a decoration of floral character is to be found in the Antefixæ, which in the Doric style decorated the ends of the ridges between the flat tiling of the roof. These show a series of lobes branching from a centre in a manner suggested by, but not imitating, floral growth. This ornament, which has become known as the Anthemion or Palmette, can properly be said to have outlived in popularity any other motif in use. From embellishing the remarkably beautiful frieze of the Erechtheion it has come down to be the predominating element in modern temples, which are anything but Greek, and in furniture many times removed from the age of Pericles.

The manifestations of the Anthemion are many and varied. Sometimes it is shown as a seven-branched leaf rising from a curiously shaped bud, and connected by a semicircular stem with an alternating ornament which consists of a circle surrounded by a tri-foiled leaf. One of the prin-



LV. DIRECTOIRE CONSOLE

A Directoire console in which the ornament designated as
"posts" is introduced



LVI. LOUIS XVI PANEL FOR WAINSCOTING

The use of various units assembled together as in the trophies of the Romans, demands appropriateness as well as arrangement

cial variations of the Anthemion has become known as the honeysuckle. In this the petals curve inwards instead of outwards. The very classical development of alternating the honeysuckle and the Palmette Anthemion connected by scrolls, as in the pediment of the temple of Ægina, marked the culmination of this ornament, and most adaptations since have closely adhered to this revered prototype.

The Greeks did not originate the Anthemion, but through their extraordinary skill and sense of refined outline they developed it and produced a considerable number of variants, the majority of which are of extreme beauty and invariably suited to the position which they occupy. The original type pictured the blossoming of the various shoots radiating fanlike from a single stem. In its development the Anthemion or Palmette sometimes assumes the form of a complete circle, and its spokes or branches vary in number from three to sometimes as many as eleven.

It is symmetrically constructed, in accord with a central vertical axis, on either side of which the branches radiate. The hub or centre of the radiation can be at the base of the figure or higher or lower than the base. From this can be derived three styles of Palmette corresponding to these

three different radii. There are six well-defined varieties possible in each radius, or eighteen recognized types altogether. This can be further complicated by an arrangement of two similar radii, one over the other, but with a different number of spokes or off-shoots.

The central axis or stem is always the dominating ray. It must resemble the others which flank it on either side, but be more developed or accentuated. In some instances this idea has been developed into making the central shoot a flower and the lateral shoots leaves. The centre of the Palmette does not always coincide with the centre from which the shoots radiate, and can be occupied by some such motif as a rose, discus, patera, arrow-head, leaf, medallion, mask, etc.

In their adoption of the Anthemion, the Romans added thereto a number of distinguishing characteristics, — such, for instance, as alternating the Anthemion, disposing first one pointing upwards, and the next downwards.

During the Byzantine period, and later the Romanesque and Gothic eras, the Anthemion was used but rarely. It reappeared, however, with the Renaissance together with all other forms of Greek classicism, since which time its glory has remained undimmed.



LVII. LOUIS XIV REGENCE DOOR

The shell which had already had its hour of popularity with the Romans, became the rage during the Renaissance and particularly during the reigns of Louis XIV and Louis XV

Another important classical enrichment is the *guilloche*, which in its incipient form suggests a tendril origin. Specimens of this ornament have been found in Assyrian floor slabs. The inspiration for the *guilloche* can be readily traced to braiding, but at a later period than the Greek there was a more definite arrangement of the plait. The *guilloche* in which the plait is single recurs in every country where the architecture of the Renaissance penetrated.

While the rectilinear ornaments are of greater antiquity, those based upon curvilinear principles have had a greater vogue. While curved decorations are not all susceptible of geometrical definition, a number of them being based upon sentiment or pure fancy, it may safely be asserted, nevertheless, that the majority follow closely the trace of geometrical curves.

Chief among the curvilinear ornaments is the spiral (which may or may not have been inspired by the sinuous flow of the River Meander), the simple and the double volute of the Romans, and the Greek ornaments designated as posts, suggesting the movement of waves. In reality these are only a variety of volute successively repeated and connected. Another ornament which is frequently encountered at the time of

DECORATIVE ELEMENTS IN ARCHITECTURE

the best development of Greek and Roman art, and which may be said to be eternal in its application, is the sequence of small beads or pearls, generally designated as the bead and reel moulding.



LVIII. PANELLED ROOM—GOTHIC

The human face and form, conventionalized for decorative purposes



LIX. LOUIS XVI PEDESTAL

A Louis XVI piece revealing Greek and Roman ancestry

CHAPTER VII

DECORATIVE ELEMENTS

THROUGHOUT the dark ages which followed the collapse of the Roman empire, art and artistic appreciation seem to have been in eclipse, and the architecture and decoration of the period yielded little of beauty and of value. This was the age of massiveness, and of fantastic tortured forms. The classical enrichments were principally the billet and the nail-head. It was not until the thirteenth century that a defined tendency manifested itself in that the artists of the period abandoned all efforts to evolve decorative features out of their imaginations, and directly went to nature, which they copied almost without alteration. Every plant or leaf found its way into the stone churches or cathedrals to the point that the architecture of the period has become known as florid, although the leaf and not the flower was the chief inspiration. A study of the architecture of the time reveals a positive riot of plant life. The cathedrals of France, Belgium, and Great

Britain, those of Paris, Rheims, Amiens, Meaux, and Chartres, are all of them resplendent with this Gothic flora.

The inspiration of Gothic curved foliage which went straight back to nature, regardless of precedent, was probably found in the suggestion given by the half-opened tips of the hart's tongue fern, before it has completely opened, and while the tips are curled over in tight knots.

From the earliest civilization, the decorative artist has closely observed the growth of vegetal species, and not only the full blossom but the root, bulb, and twig, the vine, petal, and calyx, have helped him in designing new forms of ornament. It is easy, for instance, to trace the parentage of the culot, which is a close reproduction, conventionalized of course, of the peduncle of the flower. The petals of the lotus flower, which separate themselves fanlike in all Egyptian decoration, emerge from a culot with a double volute. Another culot serves as a base for the sacred tree of the Assyrians, while in Greece the culot assumes its definite classical shape by borrowing some of the properties of the acanthus leaf. Ordinarily it presents itself under the form of three leaves, with tips out-turned, one facing and two in profile.

A curious preference can be observed on the



LX (a). LOUIS XIV DIVAN



LX (b). SPANISH RENAISSANCE DIVAN
Variation from the same theme

part of artists and architects of the Middle Ages when the church adornments from the thirteenth to the sixteenth century are studied.

The thirteenth-century sculptors and decorators who inspired themselves from plant models invariably copied and adapted the vegetation of spring, whereas during the fourteenth century we find them employing fully developed foliage and vegetal life full grown. In the fifteenth century the vegetation appears withered, and is translated into stone in the aspects which it presents in late autumn. The sculpture of this period shows the larger specimens of vegetal life, and inclines toward realism in the reproductions.

Artists of the more recent day have also gone to nature directly for their inspiration. The British *pre-Raphaelites*, the devotees of the short-lived Art Nouveau, copied slavishly without giving any conventionality to their designs. We have seen the legs and supports of tables and consoles assume the form of growing stalks. And yet in the world of textiles, wall papers, and purely chromatic decoration, this too exact copying of the actual flower or leaf has frequently netted good results. The pineapple, and with it the humble artichoke, are closely related to certain very pleasing effects, commonly designated as Persian. The clematis,

DECORATIVE ELEMENTS IN ARCHITECTURE

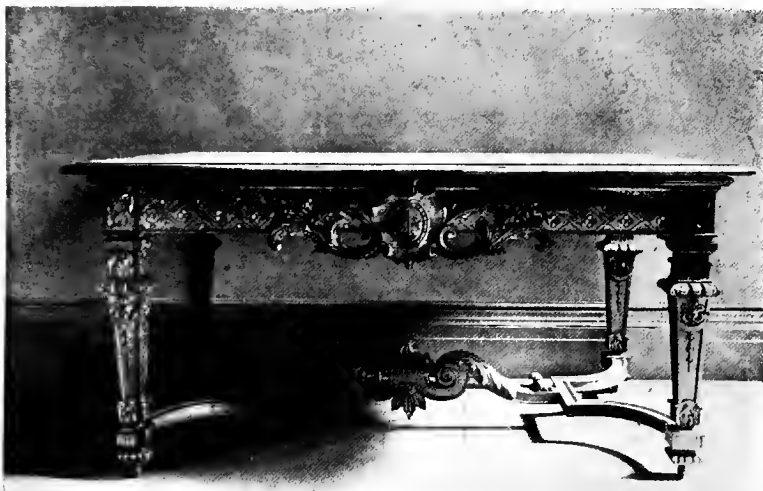
the chrysanthemum, the rose, the carnation, the laurel, and even the blue-bell and poppy, all have had their decorative use, if not in stone or wood, at least in fabrics, prints, embroideries, and tapestries, and all coverings where colour besides form can be resorted to. In fact it is difficult to conceive of any flower that has not at some time been utilized as an element of decoration.

Although turning with preference to examples found in plant life for their inspiration, decorators have ever recognized the availability of subjects to be found in Zoology and the fantastic beasts of ancient mythology. In the Orient the bull, the lion, the eagle, the elephant — all types picturing strength — have been used lavishly as monumental adjuncts. The Assyrians were particularly partial to the winged bull, while the Egyptians made frequent use of the lion, the ram, the hawk, the vulture, and the ibis.

During the Middle Ages fantastic beasts were all the more readily employed, since they gave free field to the imagination and partook besides of a certain religious symbolism. The artists of the Romanesque period loved to perch fantastic ravens along their cornices. Here and there they also used grotesque human masks, — a snail, goat, and other strange replicas.



LXI (a). TABLE LOUIS XIV REGENCE



LXI (b). TABLE LOUIS XIV REGENCE
Plus ça change et plus c'est la même chose



LXII. PANELLLED ROOM — GOTHIC

An attempt at stylization in which Gothic and Renaissance elements are joined

The Greeks, absorbed in the idealism of the human types, rather neglected animal forms. They did, however, create various monsters, such as griffins, mermaids, etc. Occasionally, they have very successfully made use of animals, notably in the snouts of lions, used as gargoyles. The Romans also adopted the lion's head, and in addition made use of the eagle, which with them portray the idea of triumph. The sculptors of the Romanesque period borrowed a great many decorative themes from the Orient. Of such are the lions disposed symmetrically on either side of the sacred tree of the Assyrians. Several monsters, and even Satan himself, entered into the decoration of that epoch. Fabulous and fantastic beasts ornament the base of the columns or serve as gargoyles in cathedrals and other structures chiefly of monastic character. Among these fabulous animals are the fabled aspic, which is a species of snake, and the basilisk, which has the front part of a rooster and ends as a serpent. The chameleon is represented as a two-footed creature with the tail of a crocodile, while the capricorn presents the body of a goat which trails off into the tail of a dragon. The centaur is of more ancient antiquity, and is based upon Greek mythology.

The varieties of chimera and of dragons are

many, chief of which is the griffin, which partakes of the eagle and of the lion, with that particularity that it is always equipped with two pointed ears. Other creatures of the tortured fancy of the time are the harpy, the hydra, and the licorn or unicorn, which is a horse growing a horn in the middle of his forehead. The phoenix, the salamander, the scorpion, the sphinx, and the satyr are all too familiar to need description here.

Among the animals belonging to the world of living beasts the lion and the eagle recur oftenest in the decoration of past ages. We have it on the best authority that the twelve steps to the throne of Solomon were decorated with crouching lion cubs. The republic of Venice, and before that the Assyrian kings, made an emblem of the lion. The gargoyles of the Parthenon have the lion head as their motif. The dolphin, represented as a symbol of the ocean, forms the almost inevitable basis of the decoration of fountains and enjoyed a particularly active vogue during the Renaissance. The bee was in use long before Napoleon adopted it as the emblem of imperialism, and the lamb plays an important rôle in Christian art. The bull, from guarding the temples of the Assyrians, has been passed down from age to age and figures in various forms in religious and profane decoration.



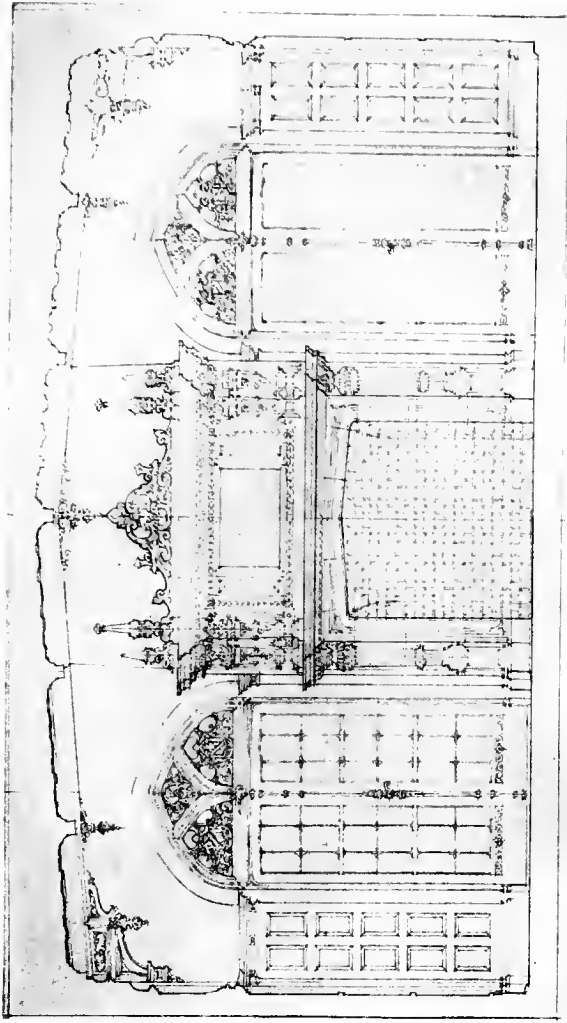
LXIII. ORIGINAL DRAWING FOR A DRAWING-ROOM

One of these, designated as the bucrane, is simply the horned skull of the animal and enters into the decoration of many Roman friezes in which is represented the aftermath of sacrificial holocausts to the gods. The deer, the horse, the dog, the owl, the dove, the rooster, the peacock, the elephant, the pheasant, the pelican, enter frequently into the scheme of decoration of the artists of the Middle Ages. In fact, it may be said as of flowers that no species has been free from reproduction, in an adapted form, at some time or other.

While the human figure has from time immemorial entered into the decorative scheme of architecture, it was used in sculpture and statuary much more than as a decorative adjunct. It did not begin to come into general use as a theme of ornament until much later than either animals or foliage. This adaptation is first apparent in the last half of the twelfth and the beginning of the thirteenth century when, with the Gothic flora, whole series of saints and clerics begin to appear affixed as pure decoration to the portals of cathedrals. Much earlier the conception of a male or female figure used as a caryatide or column found favour with the builders of temples and public edifices, while the head alone has been much

utilized, either conventionally, as the Greek masks of Tragedy and Comedy, or else as real likenesses which it was intended to fix into stone. Objects which are the handicraft of man entered into decoration principally as attributes. After the victorious campaign of the Cæsars and during the time of Louis XIV, there was everywhere a profusion of implements of war and emblems of victory. Helmets, swords, shields, arms, crowns, encumber triumphal arches and the porticoes of public buildings. During the Middle Ages the saints and martyrs are figured with their palms, the kings with their crowns, etc. During the Renaissance much use is made of Cupids, with their arrows, cornucopias, torches, and instruments of music and of the arts.

Among the products of human industry, ribbon should be mentioned first. One of the most ancient and classical mouldings represents twigs fastened with ribbon, while floral garlands are similarly bound. Often the ribbon itself is ornamented. In the Roman Byzantine period the ribbon itself in various designs of interlacing recurs with great frequency, together with the ordinary rope or cable and the everyday braid. The humble nail-head, which enjoyed such a vogue during the Romanesque period, was used in an



READING ROOM

LXIV. ORIGINAL DRAWING FOR A LIBRARY



LXV. LOUIS XV TABLE

Surfaces with double curves, concave or convex, exercise a particular restraint upon the decorator

enlarged form during the Renaissance, when the stones of innumerable façades appeared geometrically sculptured in a manner which suggests monumental gem cutting. The fronts of buildings ornamented with circles, ovals, squares, and rectangles cut with many facets are perhaps the reflection of the methods used by the goldsmiths of the period in studding their caskets and other productions with precious and semi-precious stones.

The feathered fan or flabellum which was the emblem of kingship and the royal attribute of the Ptolemies of Egypt also enjoyed its hour of popularity.

Draperies are also used, as is the scroll, which originally imitated the roll of parchment. The vase and urn, which entered rather late into the decorative vocabulary, became violently epidemic during the reign of Louis XIV, just as the shell, which had already had its hour of popularity with the Romans, became the rage during the Renaissance and particularly during the reign of Louis XV.

Other articles which are of comparatively recent introduction, but which have had a lasting vogue since their appearance, are the torches and particularly the candelabrum. We find to this day the turned shaft of the candelabra reproduced in every other table leg and grille upright. The fasces

DECORATIVE ELEMENTS IN ARCHITECTURE

originally carried before the Roman consuls have also lived throughout the centuries and will probably continue to fill a role in future decoration.

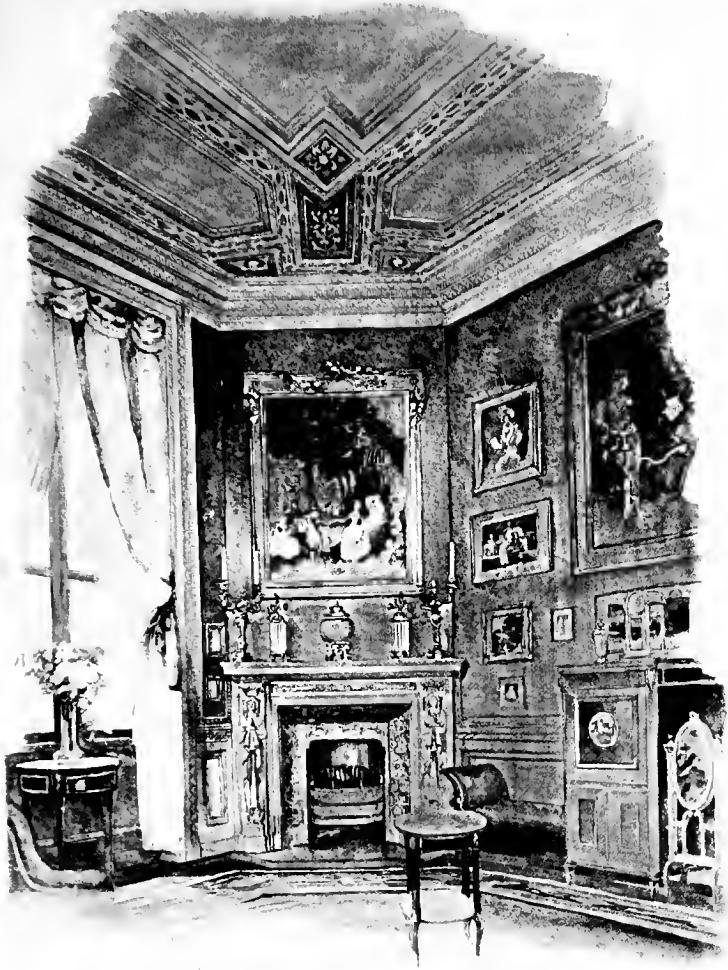
The cartouche, which can be traced to the sacred oval ornamenting the earliest Egyptian temple, has reappeared under the Greeks and the Romans, and every civilization which followed, found use for it wherever it was found necessary to frame an inscription, or to blazon forth the heraldry of some king or conqueror.

The use of various units assembled together as in the trophies of the Romans demands, of course, arrangement as well as appropriateness. In the assembling of these innumerable objects the artist must apply his sense of balance and proportion and so assemble the elements that compose his "decor" that they will not jar by reason of a conflict of lines or an incongruous contrast in form.

Two instruments of music, two implements of war may suggest themselves to the decorator composing his panoply or trophy, but there will be one of the two that will fit in better than the other and it will be that one which presents the simplest outline allied to the greatest significance. This one he must choose. Because the Romans made use of the prows of their ships of war as an ornamental motif, it does not follow that the



LXVI. LATE XV CENTURY TABLE



LXVII. ORIGINAL DRAWING FOR A BOUDOIR

modern battleship will serve the same purpose, and whereas the fork of Neptune, the sandal of Mercury, the helmet of Minerva, the lightning of Jupiter, the crescent of Diana, the arrows of Cupid, the lyre of Apollo, the thyrsus of Bacchus, all have furnished a theme which artists have developed through all the ages, it is doubtful if the telegraph of Morse, the sewing machine of Singer, the phonograph of Edison, or the automobile of Ford could be bent to a similar purpose.

CHAPTER VIII

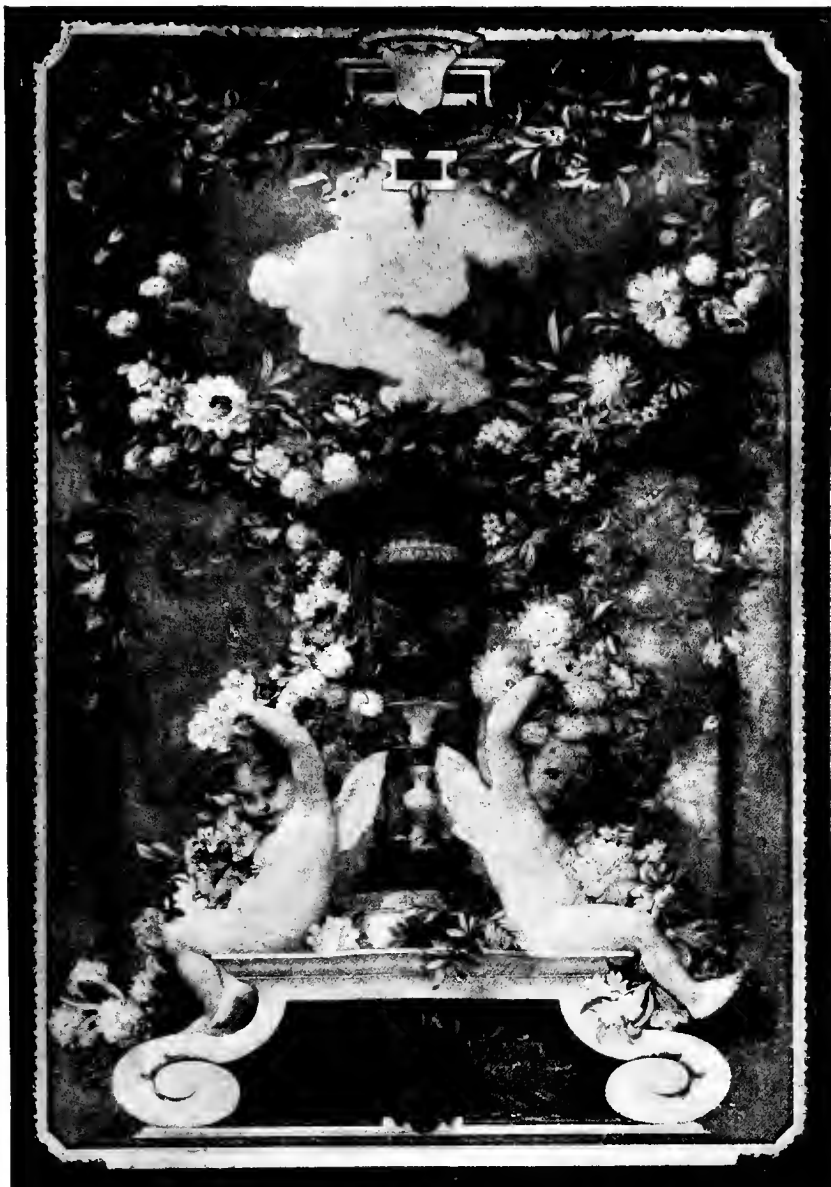
THE ART OF PENELOPE

THE much vaunted superiority of the present day over the benighted times when men were reduced to killing their fellows one by one and with stone mallets, resolves itself into the meagre fact that we are a little better off as to music — particularly the mechanical means of rendering it — than were our forbears of a thousand or of a hundred years ago.

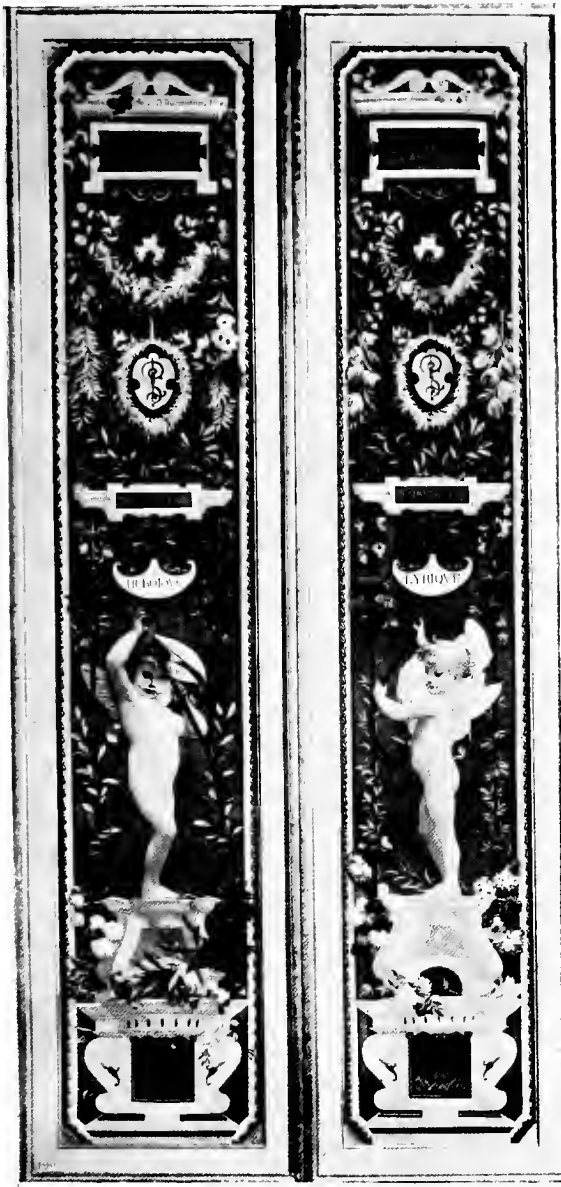
In painting, sculpture, architecture, and in everything except the purely utilitarian, the world has practically stood still. Not only have we failed in twenty-five centuries to surpass the architecture of the Parthenon and the sculpture of Phidias, but we have not even equalled it.

The same might be said of painting, had anything come down to us from the brush of Apelles. As it is, we have living proof in Raphael that no material improvements in the art of painting have been made within the last four hundred years.

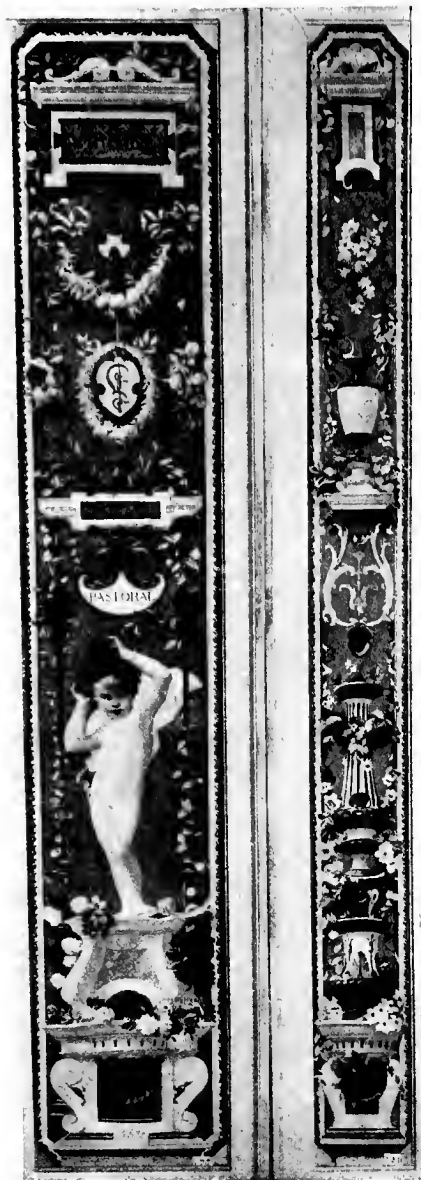
There is one art manifestation, however, which



LXVIII. GOLDEN TRIPOD. TAPESTRY PANEL
Part of decoration of Salon of the Elysée by Galland



LXIX. LYRICAL AND HEROIC POETRY
by Galland



LXX. PASTORAL POETRY
by Galland

seems to have not only lost its power of expression, but its following as well.

In the golden age of Pericles, when art was in its glory, the weavers of pictured fabrics were held in high honour. The writers of the day tell us of marvellous tapestries that tented the roof of the Parthenon, and shielded from the sun the gold-helmeted head of Pallas Athene. Word has come down to us of fabled hangings that stretched between the painted columns of that goddess's temple and on which were pictured heroic scenes from the battle of Salamis.

We hear of a funeral pageant held by Alexander the Great in honour of his friend Hephæstion, in which Babylonian tapestries and other treasures valued at twelve million dollars were consumed in the sacrificial pyre. In later days we see the peplum of Alcimene, with the gods of Olympus woven in the border, sold for one hundred and twenty thousand dollars; and the æsthetic Nero paying four million sesterces, or one hundred and sixty-eight thousand dollars, for a velarium made of Assyrian tapestry. The Caliphs of Bagdad and the Ptolemies of Egypt hung their persons and the walls of their palaces with marvellous trappings woven on the looms of Memphis and Alexandria. Wherever were pomp and magnificence, there were

DECORATIVE ELEMENTS IN ARCHITECTURE

tapestries. They were the apanage of kings and conquerors, to be flaunted in camps and throne rooms. The finest wool, silk, and silver and gold thread were employed in this manufacture, and cities like Tyre acquired fame for the dyes used.

During the dark ages, that awful Byzantine period when for nine long centuries art was banished from the earth, the art of tapestry weaving suffered the fate of all the other arts and was forgotten.

With the reawakening of the artistic conscience in the fourteenth century, however, tapestry came into its own once more. Thanks to the encouragement of æsthetic grandees like the Dukes of Burgundy, the Medici, the Popes, the French and Spanish kings, it was quick in regaining favour. By the end of the fifteenth century the weavers of Arras, Lille, Tournai, Brussels, Paris, Bruges, were everywhere acclaimed. For nearly two hundred years the looms of Flanders and of France, to say nothing of Spain and Italy, were busy translating into silk and dyed wools and gold thread the cartoons especially drawn for them by Raphael, Mantegna, Leonardo da Vinci, Titian, Veronese, Rubens, Teniers, Coypel, Le Brun, and others of lesser fame.

The relative value of painting and tapestry,

even at that period, is eloquently demonstrated by the price paid to Raphael by Pope Leo X for the ten panels of *The Apostles*. Raphael received ten thousand dollars for the ten cartoons, and Peter van Aelst, the Brussels weaver, one hundred and fifty thousand dollars. This suite is now preserved in the Vatican, and, although much of its pristine colouring is gone, its value is placed by experts at one million five hundred thousand dollars. A much less famous suite, consisting of only four panels, the *Scenes of Opera* by Coypel, sold for five hundred and eighty thousand francs in 1900.

Aside from its value as a work of art, of course, there is always to be considered in a tapestry the intrinsic value of the gold that may be used in its weaving and the value of the time devoted to the work. While it probably took Raphael less than six months to paint the cartoons of *The Apostles*, it took Van Aelst and his assistants four years to execute them on the high loom. The suite known as *The King's Story*, which is of about the same size as *The Apostles*, took ten years to make.

In the first twenty-eight years of its existence, from 1663 to 1690, the Royal Manufactory of Gobelins, numbering two hundred and fifty weavers, only turned out nineteen high-loom pieces.

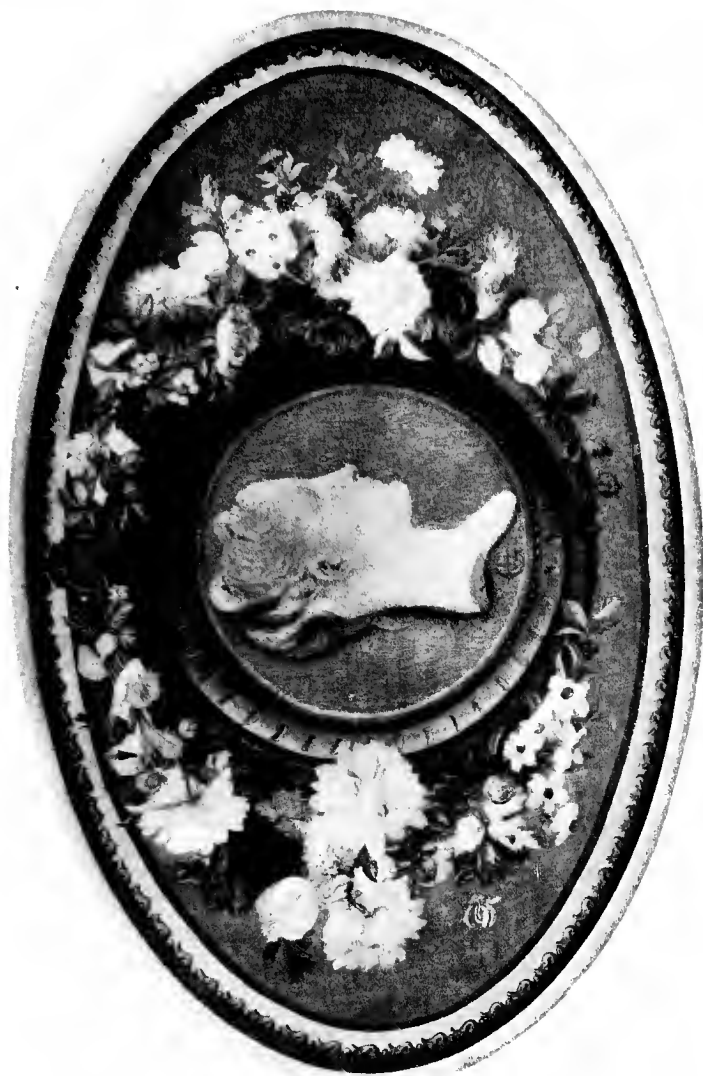
DECORATIVE ELEMENTS IN ARCHITECTURE

When we read, therefore, that in 1656 the corporation of tapestry weavers of Paris decorated the streets along which the processions of Holy Week were to pass with eight hundred panels, we can form some idea of the activity which the art of tapestry weaving had acquired in the years immediately preceding that period.

Toward the end of the seventeenth century, however, a period of depression and discouragement set in. Individual ateliers, unable longer to maintain themselves, sought the support of king or state. Brussels, which had long enjoyed a merited supremacy, found itself surpassed by Paris, where Henri II was fast gathering the best weavers of Flanders to his court.

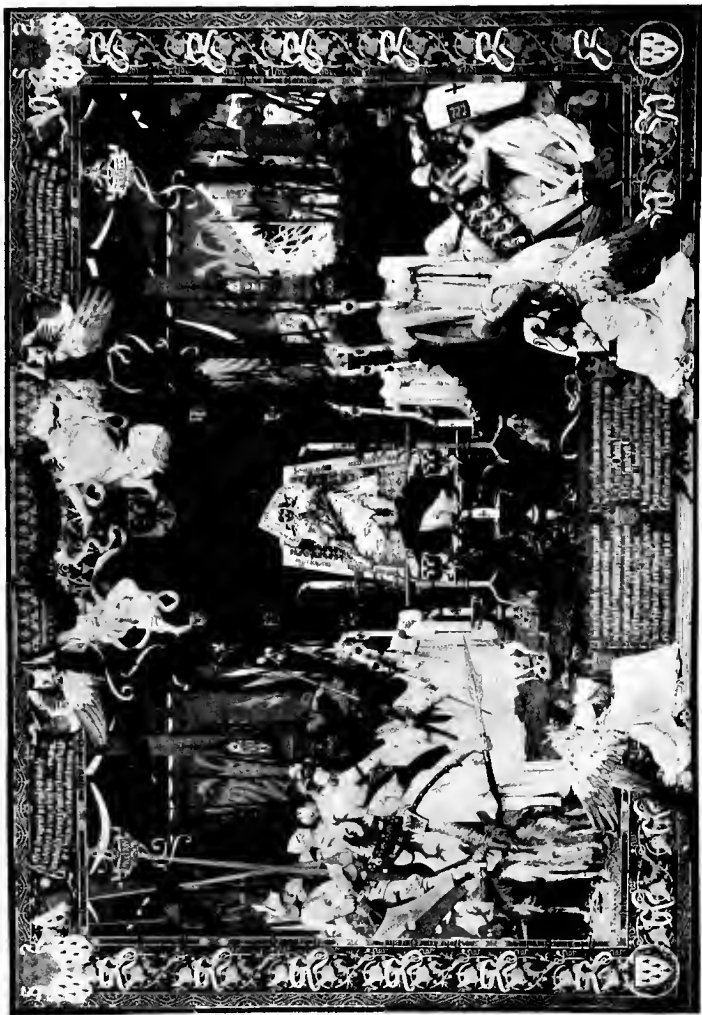
In 1662 Louis XIV, following the worthy example of his predecessor, established the Gobelins, under the title of "Manufacture Royale des Meubles de la Couronne," appointing the distinguished and talented Le Brun to direct it. The personnel numbered two hundred and fifty, besides sixty apprentices.

A hundred years ago the Gobelins were not the sole repository of the lost art of tapestry weaving. The Pope, the King of Spain, and the King of Bavaria maintained ateliers in Rome, Madrid, and Munich, and there were others in Turin and



LXXI. CARTOUCHE

From a carton by Galland for decoration of the Salon of the Elysée



LXXII. "THE DEATH OF DU GUESCLIN"

by Toudouze



LXXIII. "THE CROWNING OF NOMINOE"
by Toudouze

Naples. For more than fifty years, however, the French manufactory has been the lone guardian of this divine fire, and it is thanks to France and the Gobelins that the glorious art tradition begun by Penelope has been continued to this day.

The national manufactory is still housed in the grounds of Louis XIV, as in the time of its foundation, but the two hundred and fifty weavers of 1662 have dwindled to sixty, and the annual appropriation of two hundred thousand dollars has shrunk to fifty thousand.

It was not until 1906 that the Gobelins actually sought the limelight by exhibiting its most recent productions at the annual exposition of French artists in Paris. Even then, it was, in a sense, *hors concours*, in that it had nothing to sell. The tapestries shown were all government-ordered and government-owned. There being no way in which "the trade" can obtain Gobelins tapestries, their value to this same trade is at once heightened. The most modern Gobelins available for barter and exchange date back to Napoleon III. Since then, outside of a few pieces presented by the French republic to visiting rulers, all the tapestries have remained the property of the State.

In a degree this is unfortunate, as comparatively few can enter the sacred precincts of the Elysée,

of the Senate, or of the Supreme Court of Rennes, where the magnificent tapestries of Galland, Maignon, and Toudouze are now hung.

It would certainly redound to the greater glory of the Gobelins of to-day if reproductions of these really splendid tapestries could be hung in a public museum. The suite of Galland which ornaments the parlors of the Elysée — the French White House — is a triumph of classic composition.

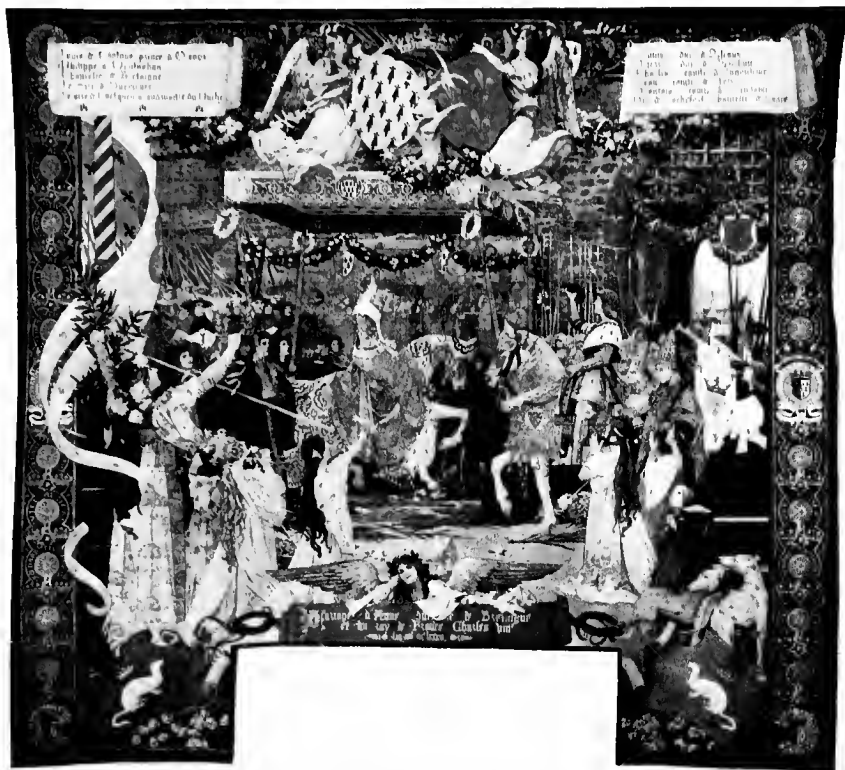
The work of Toudouze is less ornamental, more spectacular, richer in colour. It pictures the history of ancient Brittany in six crowded scenes. Nothing more regal ever came out of the Gobelins, and this was but eight short years ago.

The Gobelins

In a distant corner of that Promised Land to which good Americans are said to journey when they die, away from the radiance and turmoil of the Grand Boulevards, and almost hidden among the *ruelles* and *impasses* of that *quartier* so dear to Murger and the lovable characters of "La Vie de Boheme," the Manufacture Royale des Meubles de la Couronne rears its Louis Quatorzian pile along three sides of a cobbled quadrangle, shut off from the world by a twelve-foot wall. If it were not for the marble slab on the outer wall



LXXIV. "THE MEETING BETWEEN JOAN OF ARC
AND THE CONSTABLE DE RICHEMONT"
by Toudouze



LXXV. "THE MARRIAGE OF ANNE OF BRITTANY
AND CHARLES VIII" by Toudouze

which proclaims the fact that the Manufacture Royale was established on this site, in 1667, by special edict of the Roi Soleil, few would recognize in the age-worn edifice the temple in which has been kept burning for over two hundred years the fire of a disappearing art — an art which might already be dead so far as the average man is concerned, for few there be who know that patient weavers still sit at their looms, fitting thread to thread to make the things of beauty that only the rich can own.

The ancient Hôtel des Gobelins, dedicated by Louis XIV to the use of artists and artisans employed by Le Brun in the embellishment of Versailles and the Louvre, is far famed for the splendid tapestries that flowered upon its looms in the seventeenth and eighteenth centuries. At that period two hundred and fifty weavers and sixty apprentices were at work, fashioning into sumptuous hangings the cartoons of Le Brun, Jules Romain, Coypel, Nattier, Vanloo, Audran, Oudry, and Boucher. To-day the Gobelins employ but sixty weavers.

During the troublesome times of the French Revolution, and later, when all Europe was torn up with the conflict of arms, there was grave danger that the flickering flame of tapestry weaving

would die out. At that time Brussels and Arras and the other once famous looms of Europe had already disappeared. The Gobelins alone remained.

It, too, might have disappeared. The weavers were left unpaid for months, and that generally inexorable law of supply and demand dictated its abandonment. Tapestries, for some unfathomable reason, no longer found favour, and priceless hangings that had been the chief ornament of palace or cathedral were relegated to lofts or cellars, there to accumulate and decay.

On two occasions, in 1794 and 1850, the proposition to discontinue the manufactory was put forward, but each time there were enough true patriots and real Frenchmen in the Convention and Assembly to defeat the project, and thus the fate that overtook the art of tapestry weaving at the time of the ushering in of the Christian era was avoided.

The present bears, of course, no resemblance to the benighted period during which even the memory of the art perished. The mind cannot conceive of a repetition of that total eclipse of art which enshrouded the Middle Ages in darkness for nine hundred years. We cannot lose the memory of the splendid tapestries woven by Van Aelst, Pan-nemaker, Geubels, and other master weavers of the



LXXVI. "VERTUMNUS AND POMONA"

by Gorguet

sixteenth and seventeenth centuries, as the memory of the Greek and Roman art was lost during the Byzantine period; but it is conceivable that we might lose the technique and the manual ability to equal or reproduce them.

The maintainance of the Gobelins through revolutions and wars and general public indifference and apathy has at least postponed this possibility. Let us be grateful for that.

Ever since its foundation the manufactory has wrought solely for the King or for the State. Through royal vicissitudes, a great many Gobelins formerly passed into general circulation; but there has been no political upset in France since 1870, and the work of the manufactory since then has remained beyond the reach of the public and out of the auction-room. That such tapestries as are available for trade and barter are rare and, of course, highly prized, is attested by the sums paid for them by eager purchasers. The same pieces that were sold for a few hundred francs at the dispersal of the collection of Louis Philippe, in 1852, now bring many thousands of dollars.

All Gobelins are not worth a thousand dollars a square foot, of course, but it must be remembered that years of skilled labour of the highest artistic character go into the making of a tapestry, and

DECORATIVE ELEMENTS IN ARCHITECTURE

since a master weaver will, in a year, not turn out more than five square feet of tapestry, even at the very modest salary of five hundred dollars a year, this would bring the cost up to a hundred dollars a square foot. Add to this the cost of materials, the artist's pay for painting the original picture, etc., and a square foot of tapestry, irrespective of any artistic merit whatever, represents an intrinsic value of at least two hundred dollars.

After the French Revolution, the first evidence of a return to great tapestry weaving was the decorative ensemble ordered in 1864 by Napoleon III for one of the reception-rooms of the Elysée. As executed from cartoons painted by Baudry, nine panels symbolized the five senses. These were nearly completed on the Gobelins looms when the Franco-Prussian war broke out. At the close of the Commune an incendiary fire destroyed part of the Gobelins buildings and with them most of the work of Baudry. One panel representing the "Sense of Touch" and two *dessus de porte* depicting the "Seasons" were saved. Nothing which the manufactory has turned out in the whole course of the nineteenth century can be compared with this work. The "Sense of Touch" and the "Seasons" have been repeated since at comparatively frequent intervals, and have figured

among the presents offered by the French nation to visiting potentates.

The project of decorating the salons of the Elysée with modern Gobelins was again taken up in 1876, when a set of nineteen panels was ordered from P. V. Galland to replace the models of Baudry which had been destroyed. Besides the Muses, reduced to six in number, it comprised four allegories representing Pastoral, Lyrical, Satirical and Heroic Poetry, and two panels personating Pegasus and the lyre of Apollo. Two marble vases and a third of porphyry, with two golden tripods, completed the ensemble. The success which had crowned Baudry and Galland encouraged the Beaux-Arts to persevere in its plan to decorate the interior of public edifices with modern Gobelins. Mazerelle, Ehrmann, Joseph Blanc, Jean Paul Laurens, Edouard Toudouze, were asked to furnish cartoons for the Opera, the Luxembourg, the Bibliothèque Nationale, the Comédie Française, and the Palais de Justice at Rennes. Not all these attempts met with success. Having to ornament the staircase of the Luxembourg, for instance, the directors made the grievous mistake of commissioning eight different artists to do the work, allotting a panel to each. In order to give semblance of harmony, it had been planned

to frame all these tapestries with the same border; but when the time came, it was found that they had been woven to fit the architectural bays exactly, with no allowance for borders. As a consequence the borders had to be cut and the tapestries had to be hung unframed. This unfortunate experience bore its fruit, since it served to establish the principle that the first requisite of a decorative ensemble is unity of inspiration and execution.

Recent Gobelins Tapestries

In the last twenty-five years the Gobelins have produced four important sets, designed and woven in obedience to this formula for the Comédie Française, by Galland; the Sessions Court of the Palais de Justice, at Rennes, by Joseph Blanc; the Joan of Arc, by Jean Paul Laurens; and the High Court of the Palais de Justice at Rennes, by Edouard Toudouze. Another important set, not yet finished, is intended for the Senate. The artist, Albert Maignan, chose his subjects, eight in number, from Ovid's "Metamorphoses." Four of the panels — "Apollo and Daphne," "Venus and Adonis," "Jupiter and Semele," and "Minerva and Arachne" — are already in place.

While all these decorative hangings deserve commendation, the set composed and painted by



LXXVII. "ENTRY OF JEAN LE BON INTO DOUAI."

by Gorguet

Edouard Toudouze for the High Court of the Palais de Justice at Rennes so far transcends the others that it must be put in a class by itself.

Toudouze toiled six years on these models, and died without knowing himself one of the elect. "The Marriage of Anne of Brittany and Charles VIII," "The Meeting between Joan of Arc and the Constable de Richemont," "The Crowning of Nominoe," "The Death of Du Guesclin" — each is a masterpiece.

The Work of Gorguet

The death of Toudouze left two of the eight panels for the Rennes court-house unfinished, and chosen to execute these was Gorguet, whose "Vertumnus and Pomona" already hung in the Luxembourg. This tapestry, completed in 1899, is to a Toudouze set what a landscape is to a war pageant. The tone is one of autumnal tints and sunset effects. What particularly justified the choice of Gorguet was his mural paintings in the Salle Gothique of the Douai Hôtel de Ville. The same profusion of personages, the same richness of accoutrements that distinguish Toudouze's panels, are found in the "Entry of Jean le Bon into Douai."

Another recent historical set, finished in 1911,

now graces the walls of the Palais de Justice of Bourges. Of the tapestries not purely decorative or spectacular is a textile picture by Gustave Moreau, entitled the "Poet and the Siren," which, if weird in conception is yet art of high order.

In addition to modern cartoons, the Gobelins have of late years executed a number of copies of ancient works. Of these might be mentioned the "Venus" of Jordains, the "Marie de Medici" of Rubens, and the "Venus at the Bath" of Boucher.

Although the Gobelins ateliers are supposed to devote their labours exclusively to the manufacture of tapestries ordered by the Government, at rare intervals, through some special dispensation, they have been known to turn out a few pieces here and there for favoured individuals in private life or high dignitaries in foreign countries.

A marked tendency which has been noticed in the work of the Gobelins for the past ten years or more has been to reduce gradually the number of shades and tones formerly employed. At one time it was considered the acme of skill for the weavers, thanks to the multiplicity of tints and colours available, to turn out tapestry that was almost the exact reproduction down to the least stroke of the brush of the tableau and painting reproduced.



LXXVIII. "THE POET AND THE SIREN"
by Gustave Moreau

A wise appreciation, however, of the work of the weavers of the sixteenth century, who could depend on only a few shades and yet turned out the most admirable tapestry ever woven, caused a return to the old methods, and to-day, instead of reproducing every stroke of the brush, the artist tries to interpret the original cartoon with only twenty or thirty shades and tones.

While chiefly engaged in the reproduction of cartoons of contemporary painters like Jean Paul Laurens, Georges Claude, Albert Maignan, Edouard Toudouze, Gustave Moreau, Gorguet, Mazerolle, and even of Willette, the caricaturist, yet at the same time the compositions of Boucher and of Audran engage the time and skill of modern Gobelins weavers and are reproduced several times. The tapestries drawn from cartoons or tableaux of masters like Botticelli, whose "Spring" was translated into tapestry only a few years ago, or of Raphael's "Transfiguration," or the "Two Lovers" by Titian, show that the technique of the present-day weavers of the famous French atelier is every whit as perfect as was that of the weavers of the sixteenth and seventeenth centuries, but unfortunately, when the model given to the weaver to reproduce is modern, it lacks the element of decorative and ornamental value which the cartoons of

earlier days possessed. With the exception of the models furnished by Toudouze, Gorguet, and Mazerolle, most of the nineteenth-century cartoons are deficient in decorative value. The "Vertumnus and Pomona" of Gorguet, the entire suite picturing the history of Brittany by Toudouze, and the "Godchild of the Fairies" by Mazerolle contain in them enough promise for the future, however, to keep burning brightly the hope that as long as the Gobelins exist the world may expect new glory and splendor from this neglected field of the arts.

It was under the high patronage of Louis XIV that the Gobelins weavers attained their greatest fame. The guiding hand of Charles Le Brun, who was the director of the establishment, manifested itself in the enlisting of nearly a score of the most talented artists of the time whom he commissioned to paint cartoons for subsequent translation into tapestries.

The original plan or design in all of these tapestries is attributed to Le Brun himself. This gives the Gobelins of this period a certain harmony not found in those produced under his successors.

One of the characteristics of the Gobelin management has been and continues to be the reproduction and repetition of tapestries in proportion



LXXIX. WATER COLOUR DRAWING FOR TAPESTRY
From the earliest civilization the decorative artist has closely
observed the growth of vegetal species

with the success and beauty of the first woven specimens. Though not lacking in new and highly artistic cartoons not yet done into tapestries, the weavers are constantly at work repeating a tapestry already established as a work of art. Even Le Brun, who had dozens of subjects as yet unwoven to chose from, ordered the portieres of "Fame," for instance, to be repeated seventy-two times, and those of "Mars" sixty-seven times.

It is not always those subjects which were most frequently reproduced, however, which have gained the greatest fame.

During the twenty-eight years in which Le Brun conducted the Gobelins, there were reproduced only five or six series, which have since been recognized as masterpieces. Of these may be mentioned "Elements and Seasons," "Child Gardeners," "History of the King," "The Months," "The Royal Residences" and the "History of Alexander the Great." The "Child Gardeners" was reproduced only five times, and there is but one complete suite of the "History of the King" now in existence, but the "Royal Residences" were put on the looms five times in twelve years. The "Months" found greater favour with the Court, and we find that one hundred and ten

tapestries were executed from this model at the Gobelins.

Of all these works by Le Brun, however, the prize is undoubtedly the series known as the "History of Alexander the Great." These tapestries were not only copied eighty-six times at the Gobelins, but we find the weavers of Brussels and Aubusson copying them in their respective ateliers.

This suite consists of five subjects, representing five incidents in the life of Alexander the Great. Three of these were so large that it was found necessary to divide them in three parts, separating the groups on the right and left from the central subject. Thus we find the "Battle of Arbelles," "Battle of Porus," and the "Battle of Grenique" divided into a central panel and two lateral panels. The complete suite hangs in the Louvre and is an eloquent monument, both to the genius of Le Brun and the skill of the Gobelins weavers of his time.

After Le Brun the Gobelins traditions suffered a temporary eclipse, but the old fire was rekindled for a while, thanks to the talent of Noël Coypel, who furnished the cartoons for the suite known as the "Triumph of the Gods" which has since ranked among the most glorious tapestries of the Manufacture.



LXXX. BEAUVAIS LOW-LOOM TAPESTRY
after Oudry

The Gobelins factory, which had engaged the services of eight hundred artists under Le Brun, fell into such neglect, however, from the non-payment of the weavers, due to the poor state of the Royal finances at that time, that in 1695 it had to be closed.

Two years later the interrupted work was resumed, and the factory re-entered into its functions, but on a much reduced scale.

It was during this very precarious period that one of the most famous series ever produced by the Gobelins was woven. This is the suite known as the "Portieres of the Gods," which consists of eight pieces, and represents the four seasons and the four elements, each personified by one of the gods or goddesses of Olympus. These eight pieces have been repeated again and again until the records show two hundred thirty-seven specimens as having left the Gobelins looms.

While it would seem that the number of these tapestries in circulation should take from the value of each respective tapestry, the fact is that, whenever a "Portiere of the Gods" appears in a sale it brings a very much higher price than a score of other Gobelins of which there are considerably fewer replicas in existence.

Of all the Gobelins tapestries, however, the most

famous is probably the suite which portrays the "History of Don Quixote." This remarkable work occupied the best weavers of the Gobelins from 1718 to 1794 almost without interruption. It holds a unique rank among the decorative creations of the eighteenth century, and no other shows as completely the intimate arrangement of the scenic and decorative as this does.

The subjects, which are by Charles Coypel, number twenty-eight and the borders are variously attributed to Audran, Fontenay, and Desportes.

According to the records of the Gobelins there were woven no fewer than two hundred forty pieces of the "Don Quixote" suite.

This has not dampened the ardour of collectors, however, if we judge by the price paid by Mrs. F. E. Dixon for the suite owned by the King of Spain. This suite, consisting of five pieces, was sold by J. P. Morgan in 1916 for six hundred thousand dollars.

Another series afterward produced by Charles Coypel recently achieved the distinction of bringing the highest price ever obtained at a public sale. This is the "Fragment of Opera," consisting of four scenes, and known to have been reproduced six times since.

Among other famous tapestries emanating from



LXXXI. SOFA COVERED IN BEAUVAIS TAPESTRY

The paucity of orders for monumental tapestries threw the Beauvais factory into the making of smaller pieces woven exclusively on the new low loom and designed mostly as covers for furniture

the Gobelins should be mentioned those fashioned after the model painted by Boucher, and known as the "Loves of the Gods" and "Fabled Subjects."

Beauvais

Although established in 1664 as an offshoot of the Gobelins, the Manufacture Royale de Beauvais subsequently achieved an individuality which stamps the tapestries emanating from its looms with a character altogether distinct from that observable in tapestries produced in the parent atelier.

The original intention was to occupy the weavers at the Gobelins with work designed exclusively for the embellishment of the Royal residences, while the weavers at Beauvais were authorized to accept commissions from the Court and the public in general.

At the outset both high-loom and *basse lisse* tapestries were turned out by the Beauvais weavers. The high-loom tapestries produced under the direction of Behagle in 1684, notably the suite of the "Apostles" from the model by Raphael, were of the same character as those produced under the management of Le Brun in Paris. Soon, however, the paucity of orders for monumental tapestries threw the Beauvais factory into the making of smaller pieces woven exclusively on the

low loom and designed mostly as covers for furniture.

With the appointment of Jean Baptiste Oudry as director of the establishment, the high loom was entirely abandoned and the energy of the Beauvais ateliers was centred upon the reproduction on the low loom of models painted by Oudry and consisting of a decorative ensemble in which the covering of furniture matched, or at least harmonized with, the wall hangings of the apartment in which the furniture was to be installed.

Among the most famous of Oudry's decorations is the suite in which the "Fables" of La Fontaine are represented; these, together with scenes taken from the comedies of Molière, and from the "Metamorphoses" of Ovid, have been reproduced again and again and have contributed not a little to the fame both of Oudry and the Beauvais factory.

So profitable commercially did the management of Oudry prove, that the sales during his administration netted nearly a hundred thousand pounds. Oudry succeeded in interesting Boucher in the success of the Beauvais establishment and secured from him a number of cartoons subsequently rendered into tapestries and of which a single one, taken from the history of Psyche, was sold recently for three hundred thousand francs.

A number of tapestries from Boucher models are owned by the Royal families of Sweden and Italy. Boucher's "Love of the Gods" was reproduced at Beauvais, as were some other subjects less famous, but in no way less remarkable.

Every mural decoration turned out by the weavers of Beauvais had its complement of chairs and fauteuils covered with tapestry inspired from the tenture. The Palace of Compiègne is rich in furniture thus covered and few are the royal or princely habitations which have not one or more complete sets of this justly prized ameublement.

In the nineteenth century the Manufacture de Beauvais was almost exclusively engaged in turning out covers for furniture. Under Napoleon III it furnished tapestries for 180 sofas, 243 fauteuils, 532 chairs, 109 tabourets, 28 portieres or hangings, and 12 table-covers, all of which went into the decoration of the imperial habitations at Saint Cloud and the Tuileries, and represented a value of about one million francs.

From 1878 to 1889 the ateliers produced 79 mural tapestries, 64 sofas, 72 fauteuils, and 62 chairs.

The Beauvais weave is finer than that of the Gobelins high loom; there are ten threads per centimeter at Beauvais to seven or eight at the Gobelins.

CHAPTER IX

PAINTED GLASS



ALTHOUGH the most ancient specimens of painting on glass date back to the tenth century, the full development of this branch of art did not come until the twelfth century and practically disappeared in the end of the seventeenth century. It is puzzling to the minds of those who have studied the splendour of glass as it was during these five hundred years, why an art appreciated and honoured by artists of the discernment and talent of Leonardo da Vinci, Albrecht Dürer, Hans Holbein, and later by Van Dyck, Gerard Dow, Fragonard, and Ingres should have been allowed to fall into disfavour.

From its having been totally eclipsed during the eighteenth century and part of the nineteenth, there has, however, of later years been a revival of this very gorgeous adjunct to decoration, but through a lack of vulgarization and the paucity of the demand among amateurs who have the means to encourage art, painting on glass is still a



LXXXII. XIV CENTURY WINDOW

With the XIV century there appears a tendency to make a window less of a mosaic and more of a tableau

long way from what it was in the thirteenth century and for the three or four hundred years that followed. At one time it was thought to explain this neglect of the art by a declaration that the secret of the glass makers of the Middle Ages had been lost in transmission, and that certain processes, particularly the making of red glass, could but feebly be approximated by the craftsman of the present. The art of painting on glass was not constituted in one day, and the artists of the twelfth century did not reveal themselves masters in the matter over night. A long period of experiment was necessary before the various formulæ were discovered and became established, and before the technique of the master *glasiers* merged into the technique of the master painters on glass. Ever since, however, its firm establishment in Germany, and almost at the same time in France, the tradition has been handed down from century to century, and there is no secret known either in the twelfth or the sixteenth century which has not come down to us. Copper and manganese and all the other metallic oxides used in the Middle Ages are available to-day, and some that were not thought of nine hundred years ago have become of everyday application. Thanks to the impulsion given to the revival of stained glass by Viollet-le-

Duc, who engaged Ingres and Delacroix to paint the cartoons for the chateau and the church at Dreux, this form of ornamentation and decoration was actively developed in France in the middle of the nineteenth century and we find the porcelain manufacturers of Sèvres busily engaged in fashioning the vitrals for the Orléans chapel at Neuilly, for the church of St. Louis, at Versailles, and for various other public edifices ordered by the State. The activity at Sèvres brought about the establishment of private ateliers at Clermont-Ferrand, Metz, Tours, and Brussels. The glass in the portals of the church of St. Germain-l'Auxerrois in Paris and those of the Ste. Chapelle date back to this period. In the twenty years between 1850 and 1870 a great many cathedrals and religious edifices were restored by the painted glass artists of this day and generation, among them the cathedral of Notre Dame in Paris, those of Ste. Clotilde, St. Augustine, St. Mihiel, the cathedral of Chartres, Bourges, Quimper, the chapel of Vincennes, etc. Needless to say, every church built during this period was equipped with stained glass from original cartoons. The Universal Exposition of 1878 in Paris added to the movement by utilizing painted glass in other than religious edifices, and we find the windows of the Trocadero illumined with



LXXXIII. PAINTED GLASS WINDOW

The lead does not always logically divide a design but frequently it asserts the contour and gives it an exaggeration needed in large spaces such as the window openings in Gothic cathedrals

vitral depicting Japanese themes. Since then, a great many private residences and quite a few public places of amusement have resorted to painted glass in their decoration, and while the application has not always been perfect, yet the impetus received was strong enough to bring about a sort of fashion which was eminently gratifying while it lasted.

Particular distinction was given to this movement in France in 1891 by Albert Besnard, the famous colourist and painter, who until then had been known more for his mural decoration and portraits. Since this, Besnard has from time to time painted remarkably brilliant cartoons for the Musée des Arts Décoratifs, for the Paris City Hall, and for various private individuals which have been acclaimed as masterpieces of colour and ornament. The subjects chosen for the Musée des Arts Décoratifs are rural scenes, picturing wheat fields, oxen, perspective of sky and trees, and various aspects of bird life portraying peacocks, swans, eagles, and the humble barn-yard denizens. The treatment of these subjects demonstrates very clearly what may be done in painted glass for other than ecclesiastical windows.

The impetus which the art of painted glass received in the last fifty years was due to the

necessity of restoring in historical monuments portions of stained glass which had been destroyed through time or accident. This work of restoration was comparatively easy, since the artist could be guided as to the colour by the adjoining fragments, and as to outline by the lead which remained.

The most conspicuous example of such restoration are those supervised by Viollet-le-Duc, of the Church of St. Denis, near Paris. This marked the revival of an art which had been dormant for two centuries.

One of the best decorators of his day, Luc Olivier Merson, and after him men like Grasset, Jean Paul Laurens, François Ehrmann, were easily persuaded to draw cartoons on the orthodox technique of the seventeenth century, in which the chief consideration was outline. Thanks to the prestige attaching to these great artists there exists to-day enough stained glass of contemporaneous manufacture to prove that the art is not lost, and needs only a little encouragement to blossom forth again in all its pristine brilliancy.

The late W. K. Vanderbilt commissioned L. O. Merson to paint for him a series of cartoons, which have since been executed in glass, and offer the most conclusive proof of the foregoing.



LXXXIV. LATE XIII CENTURY GLASS PANEL
St. George and the Dragon

The Cathedral of Autun, the Church of Montmorency, and the brilliant series by Grasset for the Cathedral of Orleans, presenting Joan of Arc and St. Michael, and Besnard's window for the School of Pharmacy, in Paris, only serve to confirm this hopeful view.

The restoration by Ehrmann, of the partially destroyed window in the Church of Montmorency, is so perfect as to have suggested a criticism that the new part be marked in order that the future generations should know which was painted in the sixteenth century and which in the nineteenth.

Previous to the seventeenth century, the painted glass used for the decoration of church windows was produced and obtained in advance of its use, and, as it were, irrespective of its destination. The artist who had a window to compose bought his glass by the square foot, and later cut his design out of the area of red glass and joined it to another fragment cut out from an area of blue glass. It was only by superposing various thicknesses of glass that differences of shading were obtainable. Violet was produced by superposing red and blue, as was green by the superposition of yellow on blue. There are vitrals in existence in which as many as six thicknesses of glass have been utilized in the effort to obtain a certain refinement in shading.

The process employed by the artist of the twelfth century was to draw the outlines of his window on a flat table and later to apply painted glass over the pattern, following his chalk outline with a red-hot iron and thereby obtaining a break along the line of the chalk pattern. The cut-out fragments were then baked and subsequently reassembled on the work-table, where they were temporarily fixed with small nails, leaving a fissure large enough for the introduction of the lead used in solidifying the assembled portions.

Various oxides of copper were used in the manufacture of red, blue, and green glass, while cobalt, magnesia, and iron ore were used to produce the heavier shades of blue and certain tints approximating purple and pink. The neutral colouring used to paint the features and small outlines of the faces, the folds of drapery, the small details of ornamentation, all too minute to be indicated by glass insertions of different shades, was obtained through a mixture of copper and iron ore.

The primordial colours were blue, red, and green, while here and there certain shades of purple, brown, and pink were occasionally encountered. White was indicated by a very light green. Few vitrals of the twelfth century have come down to the present day and there is in

them a certain crudeness, for which possibly the paucity of inventiveness of the period and the lack of materials are responsible. The progress which is noted in windows of the thirteenth, fourteenth, and fifteenth centuries may be based upon the fact that art in all its branches was in full flowering at that time, and that the bizarre and barbarous figures of the earlier epoch have now given place to a surety of drawing which no longer shocks the eye. The fragments have become much smaller, and it is not unusual to see heads in which the contours and outline of the beard, eye, eyebrows, and nose are all leaded. There are quite a few specimens in which the eyes have an inserted iris of blue glass. The cathedral of Chartres contains one hundred and forty-seven windows in which we may admire this fineness of detail of the thirteenth-century vitrifiers. The glass in the cathedral of Reims which depicts the chronology of the kings of France also dates from this period, while the cathedrals of Rouen, Amiens, Mans, Lyons, Poitiers, Lausanne, and Florence are rich in examples of the best which this period produced. Other thirteenth-century vitrals of merit may be found in religious edifices of Pisa, Brussels, Liège, Milan, Strasburg, Troyes, Tours, Canterbury, Salisbury, Cologne, Toledo, Münster,

and Soissons, to say nothing of the three roses of the portals and transepts of Notre Dame of Paris, which are of the end of the thirteenth and beginning of the fourteenth century. With the fourteenth century there appears a tendency to make a window less of a mosaic and more of a tableau. The objects begin to appear made altogether *en grisaille*, that is, made altogether on white glass. By means of a slight coat of ochre mixed with chloride of silver a new shade of yellow has been obtained and this we find figuring more and more in the chromatic scheme of windows of this period. It is also at this time of the development of the art that the practice appears of eating through the colour of the glass with an emery wheel and thereby obtaining inscriptions and designs which appear written or drawn in plain glass against a background of red glass. More and more there is a concern for the accentuation of outline. The drawing is more subtle, and while the colouring is still in a great measure conventional, the artist is very careful to detach the various objects entering into his composition, not only by a division in lead, but by contrast in colour. Three dogs racing together will be outlined one on the other by making the first green, the second gray, and the third yellow.



LXXXV. PAINTED GLASS PANEL, XIII CENTURY
French vitrail XIII century

With the fifteenth century, the artists of the time go a little further, and attempt to introduce light and shade into their compositions, and there is a great fondness for landscapes in the background. A new perfection in the making of glass dates from this period, when a flesh tone was discovered and added to the palette of the glass painter. It was obtained through a mixture of lime, lead, and sanguine and was applied to the glass very thickly, owing to the fact that the baking action of the oven eliminated most of it. It was also at this time that the practice of cutting the glass with the diamond was introduced.

As was the case for all the arts during that happy period when artists were made and not born, only such craftsmen as had proven their ability could engage in the manufacture of painted glass. Article 46 of the statutes of the Corporation of Glasiers of Lyons under date of 1496, stipulated that the workman ambitious to obtain recognition as a master craftsman was required to make two panels, each containing at least eight square feet, and in which he was to picture Christ on Calvary and the death of the Virgin, "or any other subject imposed by the jurors." These two panels were to be painted, baked, and assembled in the shop or under the eye of one of the masters of the

corporation, and upon its being adjudged a *chef d'œuvre*, the maker could acquire it by paying into the treasury of the corporation its value as fixed by the jurors. In addition the successful candidate was expected to offer a dinner to the jurors who had passed upon his work.

No man not adjudged a master could engage in the manufacture of painted glass or accept a contract for any work of this character.

With the coming of the sixteenth century, the art of painting on glass underwent certain transformations, chief of which was the adoption of the practice of enamelling the ordinary glass with a pigment, and no longer assembling glass already coloured. Thus, a figure involving the use of four or five different colours would no longer have these colours joined with lead as by the former method, but appeared as painted directly on the one piece and without divisions. Needless to say, this method had its drawbacks, since it was the finished painting which had to be placed in the oven and not the separate fragments, so that the heat which sufficed for developing the red of one fragment or of one portion of the painting could be, as it was on occasion, too intense or not intense enough for the developing of a yellow or blue or the obtaining of delicate shades of lavender and green.



LXXXVI. XVI CENTURY WINDOW
In an English church in Sussex



For this reason the vitrals of the twelfth and thirteenth centuries are much richer in colour, while those of the sixteenth and seventeenth gain in drawing and outline and in the variety of shades employed.

As it is the purpose of vitrals to be seen always from a distance, there is to be said against stained glass not assembled by lead that it lacks in the accentuation of outline. The lead does not always logically divide a design, but frequently it asserts the contour and gives it an exaggeration needed in large spaces such as the window openings in Gothic cathedrals. It is therefore with the developing of the practice of painting *en bloc* instead of on fragments, that the art of painted glass reached its culmination and began to fade and deteriorate.

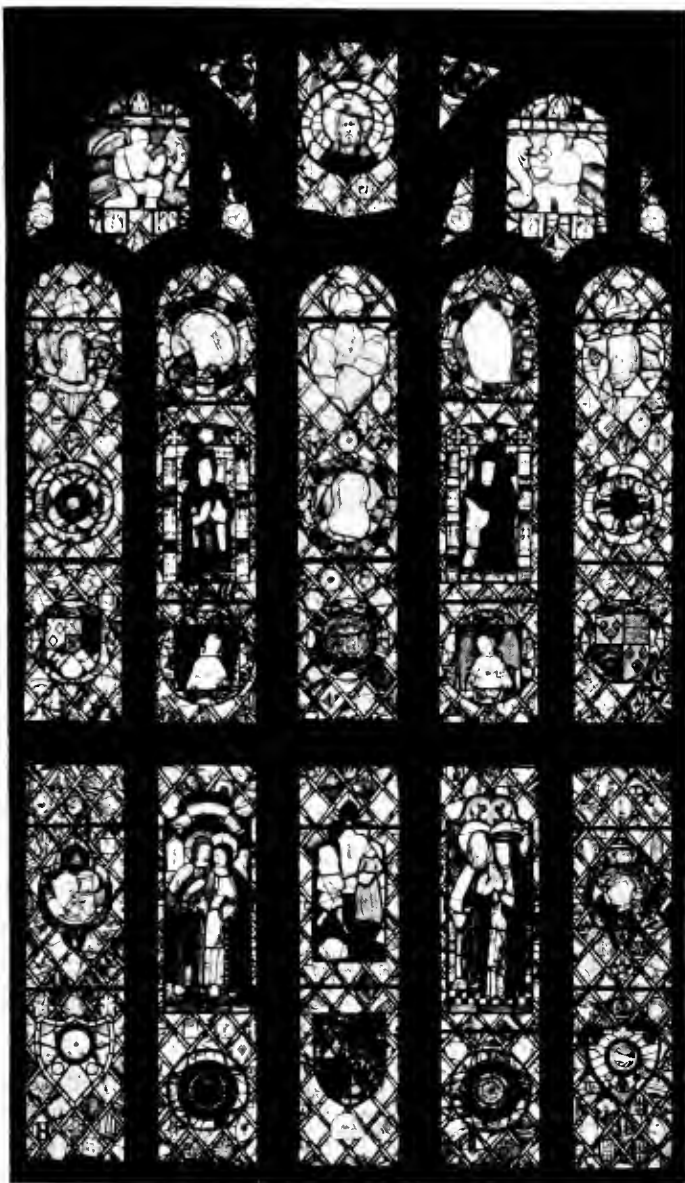
The eighteenth century sees it at its lowest ebb, and it was not until the middle of the nineteenth that a certain revival took place. The artists of the Renaissance were condemned for introducing perspective into the making of their glass, and this perhaps contributed to the disfavour which for a while signalized its use in subsequent generations.

The same reproach is laid at the door of tapestry, since both vitrals and tapestries have for their

DECORATIVE ELEMENTS IN ARCHITECTURE

chief function the decoration of flat surfaces and should not convey the idea of depth or distance.

We are far from the glory of the sixteenth century and examples of a hundred years ago cannot be compared with those in the cathedrals of Winchester, Lichfield, Burgos, Seville, Westminster Abbey, and the Reims cathedral, but there is yet hope that in the field of the profane as contrasted with the religious, a vogue for painted glass will set in that will rehabilitate this most gorgeous of decorative arts.



LXXXVII. WINDOW OF OLD GLASS FRAGMENTS
The vitrals of the XV and XVI centuries gain in drawing
and outline and in the variety of shades employed

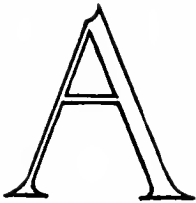


LXXXVIII. IRON LOCK PLATE

In the XV and XVI centuries the use of sheet iron became general

CHAPTER X

WROUGHT IRON



AMONG the objects which man has wrought through the ages there are few which evoke a deeper emotion or more powerful sensation than those which he has fashioned out of iron.

At sight of a work of art manufactured out of wrought iron the mind pictures the iron master at grips with the inert matter, bending his energies to the end of mastering and taming the raw substance, of rendering it malleable, and injecting into it the magic spark of life.

We picture the smith, with bare muscular arms, his face glowing from the light of the forge, striking docility into the iron with strong and mighty blows; we see him giving to the inert mass a soul and a voice, making the iron solemn or festive and putting into it the expression of his spirit, which may be sombre and severe as when he fashions the grille to a prison cell, or gay and festive as when he hammers and assembles a metal barrier to a park or garden, meant more as an ornament than as an obstacle.

DECORATIVE ELEMENTS IN ARCHITECTURE

From time immemorial the smith has had to be the interpreter of his own poetry. The technique of ironmongery has always been so arduous and difficult that the hand that designs and sketches has had to be also the hand that hammers and forges. A great deal of the work of the ironmonger appears to the eye as if it were a realization of some dream issuing from the brain of an architect concerned solely with the achievement of an ensemble constituting beauty. It is often imagined that things that can be drawn with a pencil can be reproduced on an anvil. The difficulties are less than they were. The time needed for the development of detail is less than it was. Chemistry, in providing new alloys, and giving to iron a softness almost equal to wood, has robbed the metier of the ironmonger of a great deal of its arduousness, but each masterpiece of delicate tracery and metal work that strikes the eye has had in it ten times the effort, and possibly ten times the skill, required in producing this work from wood or from a substance that can be carved from the solid and not beaten out in detail and assembled.

Difficulties to be surmounted have seemed always to be an incentive to the artist who, as soon as the task was made easy for him, at once turned from

it to find another field of endeavour in which to display some *tour de force*.

During the Middle Ages and the Gothic period the craftsmen who devoted their time and skill to ironwork directed their efforts chiefly to the making of hinges and locks. Most of the iron applied to doors or chests or wall openings had as its governing thought defence or security. It began by being massive and forbidding, but gradually, under the influence of art revival of the Renaissance, the bars and hinges, even the locks, took on an ornamental value, and each worker strove to individualize his work by giving it some deft touch, inspired perhaps by some model in church or palace.

Under Louis XIV, Louis XV, and Louis XVI iron became altogether decorative, and park grilles, stair-rails, and balconies silhouette their exquisite lines in every domain or house of importance. It was only when the introduction of casting permitted cheap imitations of those wonderful works that we find a disposition on the part of the artists in metal to neglect their art. Cast iron, however, in addition to the inherent defect of being breakable, could never approach in fidelity of imitation the wrought ironwork which it copied. The mathematical exactness of detail, easy to repeat, is

DECORATIVE ELEMENTS IN ARCHITECTURE

another vice which fortunately has prevented the complete eclipse of hand-wrought ironwork. The introduction of cast iron, while temporarily fatal a hundred years ago to the development of the art of ironmongery, has rendered a service which might be likened to that which photography has rendered to pictorial art in general, and that is that it has made possible the vulgarization, the reproduction by wholesale (although it must be admitted in an imperfect and unsatisfactory manner), of real works of art which would have remained known only regionally.

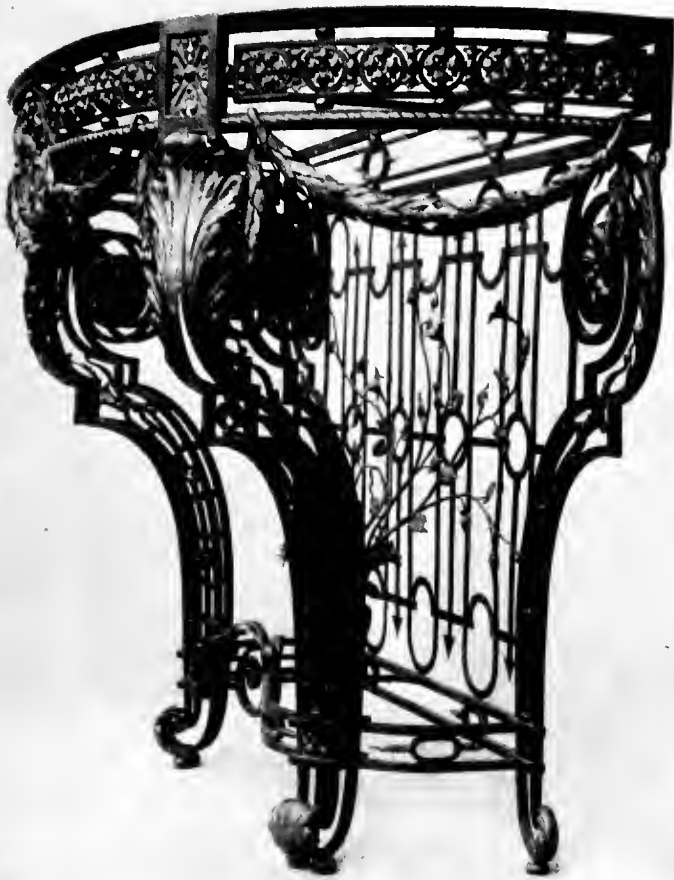
The particular richness, the quiet sumptuousness of wrought iron stair-rails, doorways, or park grilles, which made of each example a monumental jewel, only remained temporarily neglected, however, and there has been a very marked revival, first apparent in the latter days of the nineteenth century, and now in full activity, of this really fine art, which unites the decorative and sculptural, and at the same time is a distinct note unrealizable through other means.

Among the most important works which engage the school of ironmongers are the grilles. These are divided into exterior grilles, whose mission it is to enclose large places, and interior grilles, where the opening is more to establish artificial



LXXXIX. IRON LOCK

During the XV century French iron work, pris dans la masse or chiselled from the solid, gained a fame that spread to every corner of Europe



XC. WROUGHT IRON CONSOLE

Each masterpiece of delicate tracery has had in it ten times the effort, and possibly ten times the skill, required in producing this work from wood or from a substance that can be carved from the solid and not beaten out in detail and assembled

divisions in an enclosed edifice without loss of light.

The chief requisite in exterior grilles is resistance, since they constitute a defence or protection against ingress or egress. Therefore here beauty must not dwarf solidity, nor will it suffice for an exterior grille to be solid and proof against attack: it also must appear possessed of these qualities. Since these grilles are generally viewed at a considerable distance, their bars outline themselves in black against a light background, and are subject to an optical illusion which makes the surroundings appear to swallow up some of the thickness, thus giving them a thinness which they do not actually possess. In order, therefore, to conserve this aspect of force it is necessary to make them considerably thicker than the safety of the enclosed place requires.

This consideration is altogether absent in the case of interior grilles, and their delicacy can be pushed even to the point of fragility, since their object is to permit a view of that which they enclose. It would of course be an artistic solecism for it to be too close, particularly as the grilles may be looked through from the side at an angle which would make them non-transparent.

The orthodox manner, therefore, in designing

grilles is to mass the ornamentation in the pilasters or traverses and to allow the central panel or panels to be unencumbered with detail.

A consideration to which interior grilles are subject is that of the architectural spirit or style of the edifice in which they are disposed. Obviously they are intimately a part of the edifice and must harmonize with their surroundings. By reason of the fact that they must be viewed at a closer range, interior grilles demand more finish than those barring gateways to parks and estates.

In the exterior grille the thing to strike the eye will be the fundamental line in the decoration, while in an interior grille more concern will be felt for the detail.

Although we have evidence of the use by the Greeks and Romans, and by the Chinese of an earlier age, of iron for decorative purposes, we have little that has come down to us from these days to show the extent of development attained by ironworkers before the thirteenth century.

There are twelfth-century door handles, door hinges, and grilles dating back to the eleventh century, and wrought ironwork ornamenting church doors and ancient chests of the twelfth century, but the difficulties of the period, in that the smith could not buy his iron by the bar, but



XCI. WROUGHT IRON LOCK

This work presents an architectural ensemble in which every detail is carved from the solid

had to fashion it from rough ingots by hand, necessarily resulted in most of the ancient hardware assuming outline and finish far below that obtained since, particularly during the Renaissance period.

Until nearly the close of the seventeenth century about the only thing cast in iron were cannon and shot and heavy andirons and fire-backs. The only really important work which has come down to us from that time is the exterior railing of St. Paul's Cathedral in London. It was at the beginning of the nineteenth century that cast iron came into general use for such purposes.

As most of the art metal work deserving of the name is expressed in wrought iron, however, the advantage which the metal worker of the present day has over his prototype of the fourteenth century is less in the forge process than in the invention, first patented in 1784, which is called puddling, and which consists in the boiling and stirring up of the molten metal upon a hearth until all its impurities are burned out by oxygen. The iron leaves the puddling furnace as a spongy, fiery, and dripping mass and passes under steam hammers, which press the metal into blooms. The blooms are reheated and put under the rolling mills and drawn into bars. The result is a soft and fibrous

metal which lends itself admirably to the shaping and fashioning of the most delicate tracery with the expenditure of a minimum of effort. We may dismiss as crude and artistically unimportant the clamps, hasps, and locks which bound and secured, rather than ornamented, the treasure chests of the Middle Ages. Even the Norman work of the twelfth century is more interesting for its antiquity than for its artistic value. Most of the ironwork of this time is applied to doors in the form of strengthening straps and hinges and is made out of sheet iron cut out and nailed to the door.

It was only toward the end of the twelfth century that ornamental ironwork may be said to have engaged the interest of the artist. Particularly in France do we find this tendency to combine the useful and the ornamental coming into favour. The hinged straps and scrolls are no longer scored with a chisel, but moulded under the hammer. This particular type is marked by the constant repetition of a tongue between two unequal scrolls for every termination. The ornaments are not welded together, but nailed separately to the door.

It was about this time that grilles of scrolled iron came into use both in France and England as enclosures in abbeys and cathedrals. These boundaries to the choir, transepts, and side chapels are



XCII. LANTERN — LOUIS XVI STYLE

A lampadaire of the XIX century that Benvenuto Cellini or Caffieri would not have disowned

represented by fine examples in the Winchester Cathedral, the Pamplona Cathedral in Spain, in a side chapel at Le-Puy-en-Velay in France, and in the Lincoln Cathedral. This last is composed of a massive frame divided into panels, filled in with a multitude of small scrolls tied together in pairs. This same pattern was used in the grilles behind the altar of Notre Dame in Paris and in those of the Arras Cathedral, which have since been destroyed.

The birth of Gothic architecture in the thirteenth century was reflected in an increasing grace and elegance in the ironwork of the period. Grilles are no longer put up for protection and defence and are used more as an element of refined ornament. We find the same elaborate foliated sculpture in iron scroll work as in church masonry. The scrolls assume long sweeping lines and graduated circles filled with lilies and stalks terminating in full-grown iris flowers. The vine, with its fruit, foliage, and tendrils, is used on a great many of the church doors of this period.

To produce this richly stamped ironwork the smith had to strike hot iron into prepared dies, as wax is pressed into a seal. By this means designs could be executed with the same minute elaboration as in carving. The secret of preparing and

using steel dies was of French origin, and it is in France that we find this style of stamped work developed to its fullest magnificence in the door hinges of Notre Dame in Paris and the cathedrals of Sens, Mantes, and St. Denis.

The hinges of the Porte Ste. Anne of Notre Dame remain as a masterpiece of the ironmongery of the day. The work is extravagantly rich, the hinges consisting of three spiral scrolls radiating from a central stem deeply fluted and richly ornamented with tufted ends. The foliage of the scrolls bears here and there strange birds, probably of symbolic significance. Each hinge and strengthening piece is a separate independently designed work, complete in itself, with little reference to its neighbour, neither interlacing nor planned to any general scale, and yet in perfect accord with the general symmetry of the design. There is no authentic record as to the identity of the artist who composed this remarkable jewel, but tradition ascribes its authorship to a Burgundian smith of the sixteenth century named Bisconet. So remarkable in workmanship are these hinges that Mathurin Jousse, writing in 1627, regrets that Bisconet died without passing on to posterity the secret of running iron as other fusible metals. No higher tribute could be paid than this con-

fession by the most noted smith of the day that he was unable to conceive that anything so rich could possibly have been forged, and that he was driven to suppose that it had been cast by some utterly lost process.

The texture of iron becomes loosened by heat, and as it softens bars will droop and curl into scrolls under a relatively slight effort, this property making of it an obedient metal in the hands of the smiths. When hot it can be welded, separate pieces adhering firmly together if hammered or pressed. The rich intricate effects apparent in the work of Bisconet were produced by this means. The thirteenth-century smith had indeed to strike while the iron was hot. His tools consisted merely of hammer, anvil, forge, bellows, tongs, and chisel. The several pieces in a grille had to be fixed by driving holes through the heated iron and riveting them together, or, more commonly, by binding the pieces round with hot wisps of iron called collars.

While the smith of to-day can buy his iron ready rolled into a thousand different sections, the contemporary of Bisconet had to beat out every section with his own hands. The olden-time smith cut a piece from his shingled bar which he judged by the eye would beat out into a rod of the required length or curl into a scroll of the desired

form. More or less sufficed for him, and by his method he produced an artistic irregularity in even the most monotonous designs.

The closing of the thirteenth century marks the end of genuine blacksmithing. With the beginning of the fourteenth century the smith no longer relies exclusively on hammer and heat to produce his effects. He begins to deal with iron while cold. File and saw, vise and drill, are called to his aid to shape the pieces, which are then bolted or riveted together without heat or tenoned and mortised as in joinery. Sheet iron pierced into tracery or cut and hammered into the shapes of leaves and flowers begins to enter into the composition, and the art of the blacksmith merges into those of the locksmith and armourer.

The choir gates from the Rouen Cathedral show one of the earliest adaptations of this process to grille work. Each door is formed of half round iron bars crossing diagonally with other bars, intersecting the spaces at right angles and stamped at the ends into leafy terminations. Every triangle thus formed contains a looped scroll finishing alternately in stamped heads and rosettes, with a simple tracery in the eye of the loop. This trellis design is believed by many to be the earliest example anywhere of flat iron tracery applied to grilles.



XCIII. FRENCH GOTHIC CHEST

Ironmongery that approaches face-making. A treasure in the Cluny Museum

During the fourteenth century grilles made of small bars threaded vertically or diagonally through each other and enriched with pierced plates and borders made their appearance in France. The quatrefoil design recurs frequently, and the basis of most of the grilles is architectural or geometric.

A great many window grilles, rich in design and execution, date from this period, notably those in the Cathedral of Troyes, which is overlaid with pierced bands and rosettes and is ornamented by a rich crocketed top. Another dates back to the fifteenth century, and preserved in Nancy is a grille of trellis work almost completely hidden by beaten foliage and tracery.

Most of the British metal work of this period shows very clearly the influence of the French artists. The window grilles in the Canterbury Cathedral were fashioned by the French architect William of Sens. A pair of gates in the Chichester Cathedral is made of bars neatly halved where they intersect to form a number of small square panels. Each frames a square plain quatrefoil, then the prevalent ornament in France.

The Henry V Chantry grille in Westminster Abbey, which dates from 1428, is plainly borrowed from the grille in the Church of Saint Pierre at Caen. All the scrolls, including the massive tim-

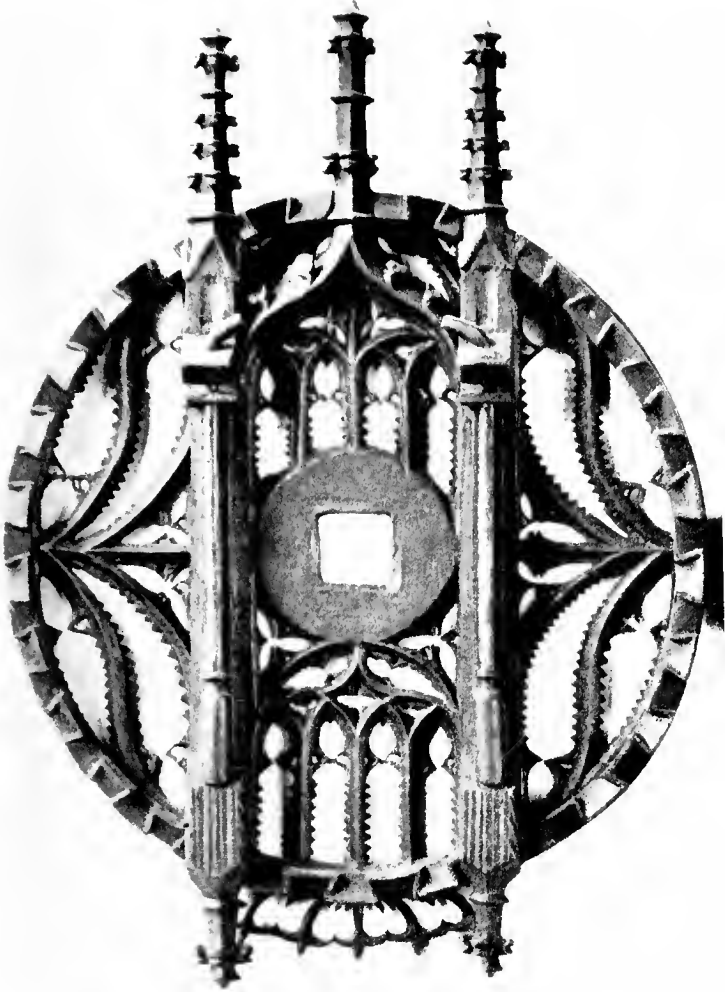
ber frame, are reproduced in iron by a combination of smith work and pierced sheet iron. Here also the quatrefoil diaper is used. Another direct copy in iron of French fourteenth-century joinery occurs in the choir gates of the Canterbury Cathedral, the original of which may be found at Luxeuil.

In the fifteenth and sixteenth centuries the use of sheet iron became general. The metal is pierced and embossed into rich leaf form and frequently several thicknesses of the metal, pierced to represent tracery, are riveted together in such a way that each thickness presents a different outline.

By the use of these superimposed pierced sheets, the utmost delicacy in outline was obtained. The panels in the sacristy door in the Cathedral of Rouen are a fine example of this laborious treatment. The crockets, pinnacles, and leading lines of the tracery are chiselled and filed from the solid iron in full relief.

Locks and knockers of this period chiselled out of solid iron, and chased as if in silver, are much sought after by collectors, who have given as high as five thousand dollars for a single specimen.

The French smiths, who had always enjoyed a reputation for high skill and fecundity in designing, added to their renown during the fifteenth century, when French ironwork, *pris dans la*



XCIV. FRENCH LOCK PLATE
XV century locksmithing

masse, or chiselled from the solid, gained a fame that spread to every corner of Europe. Unlimited time and consummate knowledge, to say nothing of native good taste, were expended by the French smiths in these productions, and the examples which remain are all marked by peculiarly artistic refinement characteristic of the French artist of the fifteenth century.

The designs are conceived in the finest mediæval spirit and the work presents an architectural ensemble in which every detail is carved from the solid and where the background consists of plate work of intricate tracery.

The museum of Cluny possesses several specimens of locks dating from this period, which are works of art in the highest sense of the word. A smith of the period aspiring to the rank of master craftsman was held by the statutes of the brotherhood to devote two years to the making of one lock, which would afterward have to be passed upon by a jury of masters and accepted by them as a qualifying *chef d'œuvre*.

In the fifteenth century the locksmiths were the most powerful corporation of Paris, and as late as 1549, when Henry II made his entry into the Capital, they still ranked fifth in point of importance and were represented by sixty masters

attended by their apprentices. Locksmithing, however, reached its apogee in France under Louis XIII, when the monarch who personally delighted to work at the bench and forge, fashioning intricate locks and elaborately ornamented keys, installed in the Royal Palace the famous locksmith Rossignol, with the title of *Serrurier du Roi*. The smiths of the day, however, did not limit their efforts to the turning out of locks, and we have innumerable door knockers, steel mirrors, wall brackets, and chased flambeaux to attest the versatility of the metal workers of that period.

The magnificent chandelier of polished iron preserved in the Cluny Museum and innumerable lanterns of the seventeenth century remain as evidence that the art of to-day has progressed very little if at all since that Golden era.

As for architectural applications we find stair-rails, screens, balcony-rails, park gates, sign brackets, etc., coming into favour as far back as 1610, when Louis XIII commissioned the foremost smiths of his day to flank the staircases of the Palais Royal and of the Chateau of Fontainebleau with balustrades of chased and gilt iron. The railing around the statue of Henry IV on the Pont Neuf, in Paris, which was ordered by Richelieu in 1640



XCV. MODERN GRILLE—SPANISH INSPIRATION

Modern grille work showing Spanish influence and inspiration



XCVI. XIV CENTURY KNOCKER

or thereabouts, is described by Evelyn in his diary as "very magnificent."

The vogue given to this form of ironmongery by Louis XIII developed and greatly expanded under the reign of Louis XIV, when Royal Palaces were invariably approached through spacious court-yards, surrounded by elaborate iron railings and entered through magnificent gates.

The stair balustrades of this period assume a sumptuous character, and the magnificence of this work is second to none of the other arts which flourished during that rich epoch.

Commissions given by the King for the Palace of Versailles amounted to over a million livres for the metal work alone. The great Screen to the Court of Honour with its gates cost no less than thirty-two thousand pounds.

Other remarkable examples of grille work and stair-rail of the Louis XIV period still exist at Marly, Fontainebleau, St. Cloud, St. Germain, Chantilly, Choisy, Meudon, Sceaux, and Vaux Le-Vicomte. Each of these specimens is rich and costly and full of nobility and grandeur. The smiths who executed them were lavishly patronized, and were moved in addition with a real pride in their work.

Louis XV did not continue the tradition of his

predecessor with the same degree of lavishness, but the Court and the Church became increasingly munificent in their patronage of the art, and we find nearly every cathedral in France embellishing itself with magnificent choir screens, some twenty feet in height and designed by the most eminent artists of the day.

The choir screen of the Church of St. Germain-l'Auxerrois which Pierre Deumier had contracted to execute for the sum of thirty-eight thousand pounds, was found to be so much more beautiful than the clergy of the Church had anticipated that the astonished smith was presented with a bonus of twelve thousand pounds.

Towards the middle of the eighteenth century ironwork shows the influence of the change in style and growing tendency to the classical. Lines reach a Greek precision, and curves gradually disappear in favour of rectilinear ornament.

The metal work of the time of Louis XVI, however, is only a shade less beautiful than that executed in the reign of Louis XIV and Louis XV, and the screen of the courtyard of the Palais de Justice is there to substantiate this assertion.

The ironwork of Spain, although not as glorious in traditions and aspect as that of France, achieved such an individual quality during the sixteenth



XCVII. FRENCH DOOR KNOCKER
French Knocker XV century, pris dans la masse

century, particularly in its application to grilles in ecclesiastical edifices, that it has imparted a distinct national lustre to metal working in that country which the ironwork of Germany or Flanders never possessed.

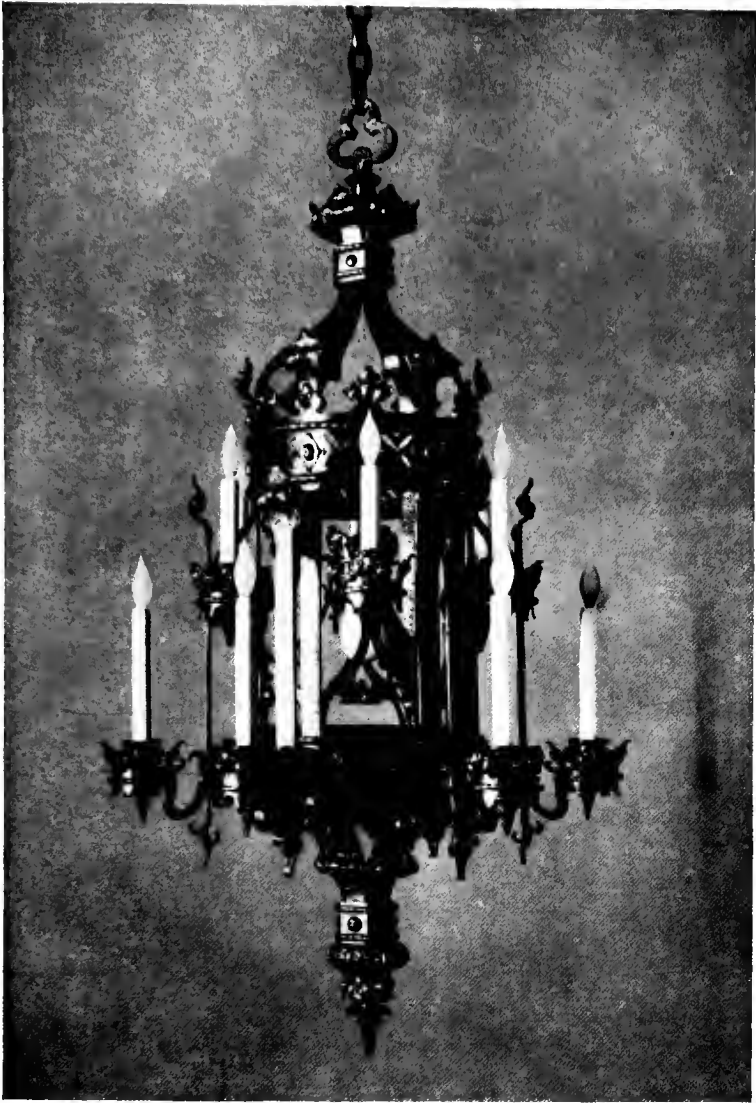
Examples of twelfth and thirteenth century screens are met with in which the French inspiration is readily traced, but when we come to the sixteenth century we find in the design of the *rejas*, as the surrounding screens shutting off the main altar of cathedrals are called, a startlingly original note struck by the adoption of spindled balusters with moulding, in place of plain rectangular bars. The technical difficulty attending the forging of these spindled balusters was such that they were rarely attempted in hammered iron, until adopted by the Spanish as a type. To produce these not in twos or threes but literally in thousands must have been a work of colossal labor. In many of the *rejas* of that period, however, they are actually as common as plain rectangular bars elsewhere and as if to excite admiration whole rows are embellished with foliage carved out of the solid. The effect of this spindle baluster in conjunction with architectural supports and cresting in the florid Gothic style is effective in the extreme.

In the most elaborate examples many figures are introduced, and even scenes and historical events, to such a degree that they resemble goldsmithing on a monumental scale more than ironmongery.

The *rejas* of the Cathedrals of Seville, Toledo, Granada, and Burgos rise majestically to a height of forty feet or more. The spindles are forged from the solid, but the pilasters and some of the cornice work are of wood cased with thin *repoussé* iron. One of the *rejas* that has come down to us is that of the Capilla Mayor in the Seville Cathedral which is the work of the celebrated friar Francisco de Salamanca. This is in plateresque style, with three tiers of spindle balusters, divided by massive-looking pillars sheathed in rich stamped iron. In addition to the sumptuous frieze of finely modelled medallions and arabesques with figures, a lower and equally rich border intersects the screen, while the cresting is a truly marvellous work crowded with saints and angels within scrolls or standing on pinnacles among tall candelabra.

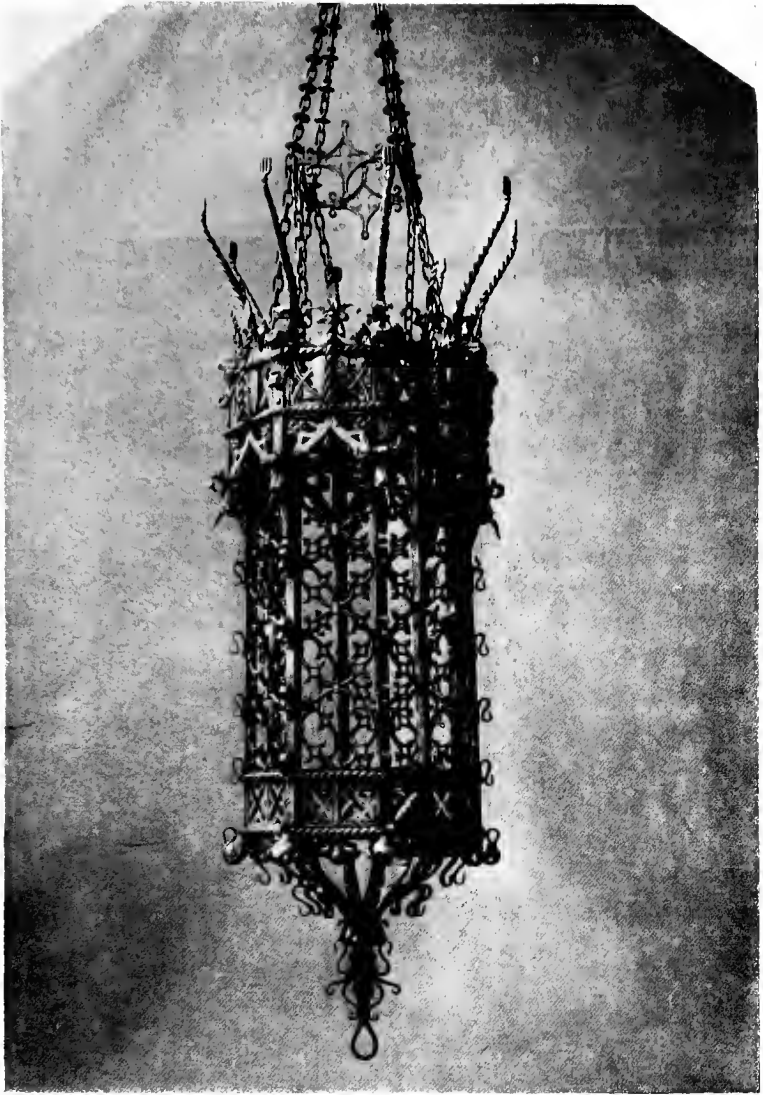
Other works by this same master are the screen in the Convent of Guadalupe and that in the Salamanca Cathedral.

The Seville Cathedral is also the repository of a gold screen which encloses the choir and which is



XCVIII. CHANDELIER

Thanks to the greater malleability of iron, the modern product
is more finished



XCIX. GOTHIC LANTERN

A modern lantern in the execution of which the smith must share the credit with the designer

the work of Sancho Munez. The central mass is in this instance of twisted bars with iron-sheeted pillars at intervals in which a lavish display is made of exquisitely embossed detail with a tier of spindle balusters above and below. The frieze displays the five Apostles in medallions and is surmounted by a heavy moulding and fretted cornice, which in turn is topped by a cresting divided by towering candelabra separated by fine scrollwork.

The *reja* in front of the Capilla Mayor in the Cuenca Cathedral by Hernando de Arenas and that in the Palencia Cathedral by Cristobal Andino are also notable examples of this distinct type of grille. The Cuenca *reja* rises to a height of forty-five feet, while that of Palencia is nearly as monumental.

Like the fine grille of the Chapel del Condestable, in the Cathedral of Burgos, they date from the beginning of the sixteenth century and are magnificent examples not only of design but of execution.

The names of Bartolome, Domingo Cespedes, Francisco de Villalpando, Gaspar Rodriguez, and Juan Bautista Celma are signed to other magnificent *rejas* in the cathedrals and churches of Granada, Toledo, Plasencia, and Sargossa; and while

DECORATIVE ELEMENTS IN ARCHITECTURE

the grilles in the cathedrals of Oviedo, Panplona, Segovia, Siguenza and Tortosa are signed by artists of lesser fame, they yet possess the same element of restraint and beauty that are but variations of the one type.

T H E E N D

